

**NEW GOLD RAINY RIVER MINE
APPENDIX B
EMRS RECORD OF CONSTRUCTION**

2022 EMRS Progressive Reclamation Record of Construction

January 13, 2023



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okane

Integrated Mine Waste Management
and Closure Services
Specialists in Geochemistry and
Unsaturated Zone Hydrology

2022 EMRS Progressive Reclamation Record of Construction

1003-223-001

January 2023

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Rev. #	Rev. Date	Author	Reviewer	PM Sign-off
0	January 13, 2023	BH	HC, TT, DC	TT

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EXECUTIVE SUMMARY

The EMRS stockpile contains potentially acid generating (PAG) rock, and it is important that the engineered closure cover system is constructed as designed to mitigate the ingress of oxygen and reduce net percolation of water, thereby lessening the release of acid leachate from the landform. The cover design includes a 0.5 m compacted clay layer (CCL) and 1.0 m non-compacted layer (NCL).

Construction Quality Assurance (CQA) remains a key component of quality management during construction. Okane Consultants Inc. (Okane) considers the role of CQA to be one of proactive defect prevention, with a focus on the process for managing quality. This differs from Construction Quality Control (CQC), which is focused on the verification of quality, traditionally through inspection and testing. CQC services for 2022 progressive reclamation on the EMRS were provided by Tulloch Engineering Inc. (Tulloch), who were on-site full-time for the duration of construction activities. CQA services were provided by Okane through a full-time on-site presence as well as through remote support when necessary. CQA included the assessment of construction specifications throughout cover system construction, regular audits of the onsite CQC and inspection activities, review of CQC testing data and observations, borehole permeameter testing, and technical support as required.

The material used for construction of the closure cover system was sourced from the open pit at the mine site and stockpiled at borrow areas for use in progressive reclamation. The variability of the material and associated compaction properties presented dynamic conditions, requiring a thorough understanding of the material properties and cover system objectives for CQC and CQA activities. Particularly, the ability to correctly characterize material type and understand the relationship between test results and hydraulic conductivities of the compacted clay layer component of the cover system continues to be a key focus of the CQC / CQA program.

A total of 1.6 ha of closure cover was constructed during the 2022 season, bringing the total reclaimed area to 13.6 ha. Further hydraulic conductivity is required within Panel 30 (0.8027 ha) following inconclusive results due to high rainfall events that occurred during testing periods. Following the completion of the in-situ testing, the accurate determination can be made if placed material has met the required level of hydraulic conductivity for the cover system to function as designed.

Key learnings from the 2022 construction season included:

- The return to utilizing four passes with the sheepsfoot roller during the compaction process resulted in a lessened need for the implementation of compactions trials to confirm adequate compaction (Section 5.1.1).

- The extension of NCL placement in the area where topsoil berms were present aided in adequate drainage off the cover system being achieved (Section 5.1.2).
- Increased panel size at the start of the 2022 season led to the inability to cover CCL lifts prior to the occurrence of desiccation (Section 5.1.3).
- Timely submission of laboratory and survey data for entry into construction data management software allowed for reduced review times and issue identification (Section 5.4).
- Completing waste rock surveys, prior to stockpiling of material within panel boundaries avoided resulting investigations and delays (Section 5.5.5).

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Project Objectives and Scope.....	2
1.2	Report Organization.....	2
2	BACKGROUND.....	4
2.1	Closure Cover System Quality Assurance Process	4
2.1.1	Purpose and Approach.....	4
2.1.2	Material Characterization	5
2.1.3	Geotechnical Stability	5
2.1.4	Field Compaction Testing.....	6
2.1.5	EMRS Cover System Operational Handbook (Technical Specifications)	6
3	2022 CONSTRUCTION SEASON SUMMARY	9
3.1	Cover System Construction Roles and Responsibilities	9
3.2	Scope of Construction.....	12
3.2.1	Safety and Environment	12
3.2.2	Equipment Used	12
3.2.3	Naming Convention.....	13
3.3	Construction Completed in 2022	13
3.3.1	May Summary	13
3.3.2	June Summary	14
3.3.3	July Summary	15
3.3.4	August Summary.....	17
3.3.5	Material Placement Details.....	19
3.3.6	2022 Lift Thicknesses.....	20
3.3.7	Preparation of the Mine Rock Surface	20
3.3.8	Compacted Clay Layer (CCL)	21
3.3.9	Non-Compacted Layer (NCL)	24
3.3.10	CCL and NCL Laboratory Testing Frequencies.....	25
3.3.11	Comparison Samples	29
3.3.12	CCL and NCL In-situ Testing Frequencies (Record Testing).....	29
3.3.13	Toe drain and Instrumentation Exclusion Areas.....	31
3.3.14	Vegetative Cover and Surface Water Management System.....	31
4	NON-CONFORMANCES AND REMEDIATION ACTIVITIES	32
4.1	Compaction and Water Content	32
4.2	CCL and NCL Lift Thickness	35
5	LEARNINGS AND RECOMMENDATIONS.....	38
5.1	Construction Methodology	38
5.1.1	CCL Compaction	38
5.1.2	Effective Cover Drainage.....	38
5.1.3	Panel Widths.....	39

5.2	Waste Rock Surface	40
5.3	Stockpile Material Quality	40
5.4	Documentation and Data Transfer	40
5.5	Implemented Learnings and Recommendations	41
5.5.1	CCL Construction	41
5.5.2	Compaction Curve Selection	41
5.5.3	Laboratory and Field Testing	42
5.5.4	Survey Control	43
5.5.5	Documentation	43
6	REFERENCES	46

Appendix A EMRS Operational Handbook

Appendix B Summary of Laboratory and Field Results

Appendix C Tulloch Daily Placement and Heat Maps

Appendix D Daily Activities Summary, Panel Completion Records, and Tulloch Daily Reports

Appendix E Okane QA Inspection Reports

Appendix F Document Naming Convention

Appendix G Infrakit As-Built Reports

LIST OF TABLES

Table 3.1: Panel completion dates.	13
Table 3.2: Material placement volumes.	19
Table 3.3: EMRS area covered.	19
Table 3.4: 2022 lift thicknesses.	20
Table 3.5: Key-in trench summary.	24
Table 3.6: Summary of laboratory testing.	26
Table 3.7: Summary of laboratory testing frequencies.	27
Table 3.8: In situ field testing completed in 2022.	30
Table 3.9: Summary of hydraulic conductivity testing.	31
Table 4.1: Parameters for non-conforming in-situ testing.	32
Table 4.2: Percentage of non-conforming in-situ testing (field).	32
Table 4.3: Percentage of non-conforming in-situ testing (MC – corrected).	33

LIST OF FIGURES

Figure 3.1: Cover system construction responsibilities.....	9
Figure 3.2: Overview of cover system constructed during 2022 (from Tulloch, 2022a).	18
Figure 3.3: Material testing locations on the east slope of the EMRS (Tulloch, 2022a).	28
Figure 4.1: 2022 compaction curves.	35
Figure 4.2: EMRS 2022 CCL thickness heat map (from Tulloch, 2022b).....	36
Figure 4.3: EMRS 2022 NCL thickness heat map (from Tulloch, 2022c)	37

LIST OF ACRONYMS AND DEFINITIONS

Abbreviation	Full Text
New Gold	New Gold Inc.
Okane	Okane Consultants
Tulloch	Tulloch Engineering
Infrakit	Construction data management software
PAG	Potentially Acid Generating
CCL	Compacted Clay Layer
NCL	Non-compacted Layer
EMRS	East Mine Rock Stockpile
CQC	Construction Quality Control
CQA	Construction Quality Assurance
OWC	Optimum Water Content
NP	Net Percolation
O ₂	Oxygen
WML	Whitemouth Lake
RRM	Rainy River Mine
PSD	Particle Size Distribution
MDD	Maximum Dry Density
Technical Specifications	EMRS Cover System Operational Handbook
Panel	A section of cover constructed (CCL and NCL) in four lifts from material placed together in one section, and the adjacent key-in area.
SPMDD	Standard Proctor Maximum Dry Density
OVB	Overburden
L1	Lift 1 - First placed layer of the CCL
L2	Lift 2 - Second placed layer of the CCL
L3	Lift 3 - First placed layer of the NCL
L4	Lift 4 - Second placed layer of the NCL
TMA	Tailings Management Area

1 INTRODUCTION

New Gold Inc. (New Gold) continued to progressively reclaim the eastern lower bench slopes of the East Mine Rock Stockpile (EMRS) in 2022. The mine rock used to build the EMRS is classified as potentially acid generating (PAG). The cover system for the EMRS is a barrier type cover system which consists of a barrier layer overlain by a growth medium designed to limit net percolation (NP) and control oxygen (O₂) ingress to the rock below. The material used in construction of the cover system is sourced from the open pit; Okane has continued to update the Technical Specifications and a Cover Construction Operational Handbook specific to the use of this material on the EMRS. New Gold has retained Okane Consultants Inc. (Okane) to provide Construction Quality Assurance (CQA) services and technical guidance during the construction of the EMRS cover system in 2022. As part of this service, Okane reviewed and audited the Construction Quality Control (CQC) program completed by Tulloch Engineering Inc. (Tulloch), conducted in-situ investigations of hydraulic conductivity, assessed compliance with the Technical Specifications, provided guidance for further laboratory testing, and documented construction, CQC and CQA activities.

Okane has previously investigated the overburden (OVB) material suitability by performing a desktop characterization study, geotechnical veneer stability analysis, and field compaction trials. The OVB material sourced from the open pit is generally well-suited for construction of the required CCL but exhibits considerable variability in optimum water content (OWC) and maximum dry density (MDD). As such, careful consideration of material characteristics is required during placement to demonstrate appropriate compaction of the CCL. Accordingly, Okane has developed the EMRS Cover System Construction Operational Handbook (Okane, 2021b) to guide construction activities: including Technical Specifications and tolerances for Construction Quality Control (CQC) testing and a material selection guide to facilitate application of appropriate reference proctors. Okane continues to update this living document with increased confidence in material characteristic (dry density, clay content, and hydraulic conductivity) relationships and in response to changing field conditions using field testing and laboratory data results, as appropriate.

1.1 Project Objectives and Scope

The objectives of this project are to provide a detailed record of construction (ROC) report for the progressive reclamation closure cover system construction activities that took place on the lower bench slopes of the EMRS during the 2022 construction season. This ROC report serves to document the construction methodology, detail the CQC and CQA processes developed, record deviations from the Technical Specifications and design that could impact the closure cover system performance, and detail the CQC and CQA processes developed and implemented during this time. It is intended the ROC will be used to demonstrate the as-built conditions of the cover system and therefore provide confidence in achieving its expected long-term performance.

The scope of this project involved completion of the following tasks:

- Review of CQC daily reports, laboratory and field test results;
- Review of map data;
- Compilation of CQA reports and recommendations; and
- Evaluation of construction methods and CQC activities relative to Technical Specifications and closure cover system design objectives.

1.2 Report Organization

For convenient reference, this report has been subdivided into the following sections:

- Section 2 – describes the EMRS closure cover system design and objectives, and discusses the closure cover system quality assurance approach used for the EMRS;
- Section 3 – provides an overview of the construction scope and cover system construction activities completed during the 2022 construction season;
- Section 4 – discusses occurrences of non-compliance with the Technical Specifications for cover system construction, and associated re-work activities;
- Section 5 – provides a summary of learnings and recommendations for future programs;
- Appendix A– includes the EMRS Cover Construction Operational Handbook;
- Appendix B – provides a summary of both field and laboratory results;
- Appendix C – includes daily placement and heat maps provided by Tulloch;

- Appendix D – provides a summary of daily activities and a record of completed panel sections and includes Tulloch daily reports;
- Appendix E – includes quality assurance inspection reports.
- Appendix F – includes the 2021 document naming convention memo.
- Appendix G – includes Infrakit As-Built reports for CCL and NCL thicknesses.

2 BACKGROUND

The EMRS has been designed for the purpose of storing and encapsulating PAG mine rock. The cover system consists of a barrier layer overlain by a growth medium, designed to limit both NP and control O₂ ingress to the PAG mine rock. The barrier layer within the cover system controls O₂ ingress by effectively eliminating advective gas transport and is an integral part of the overall effectiveness of the cover system. Typically, a barrier layer is classified as a material that limits the maximum saturated hydraulic conductivity equal to or less than 1×10^{-9} m/s. The cover system will be placed over the side slopes, benches, and the upper plateau areas of the stockpile, progressively during operations, and at closure.

The two-layer cover system will consist of:

- A 0.5 m compacted overburden layer placed directly on the landform prepared to the required grade;
- A 1.0m non-compacted overburden layer placed directly on the underlying compacted layer to reach a nominal thickness of 1.5 m;
- A vegetation cover that meets landform land use expectations; and
- A surface water management system that allows for the landform to meet physical stability expectations.

The cover system provides source control in two ways: the limitation of O₂ into the mine rock, thereby decreasing the oxidation of sulphide materials within; and reduction of water infiltrating through the stockpile and reporting to shallow toe seepage or to the groundwater table. The non-compacted overburden material is the main store-and-release component of the cover system (growth medium), while the layer of compacted overburden material limits NP and O₂ ingress into the underlying mine rock (barrier layer).

2.1 Closure Cover System Quality Assurance Process

The following describes the work that was completed to assure the progressive closure cover system on the EMRS constructed during the 2022 season was built to design and will ultimately meet performance objectives.

2.1.1 Purpose and Approach

The purpose and approach of the closure cover system CQA program was as follows:

- 1) Determine if materials are suitable for utilization in the EMRS cover system based through desktop study of known material characterization and variability;

- 2) Monitor and evaluate construction activities against Technical Specifications, and identify areas where construction does not meet design criteria and may not meet closure objectives;
- 3) Assess feasibility of cover system construction including use of cover materials in field conditions through compaction trials and additional material characterization work;
- 4) Update Operational Handbook as appropriate, incorporating field learnings and additional material characterization data; and
- 5) Ongoing cover system performance monitoring to evaluate the constructed cover system meets performance objectives.

2.1.2 *Material Characterization*

New Gold is utilizing material from the open pit for the construction of the closure cover system on the EMRS. The identified clay OVB within the pit boundary consists of both the Brenna formation and the Whitemouth Lake (WML) formation and range in thicknesses of 1 to 5 m and 2 m to 27 m, respectively. Okane performed a review and desktop analysis of Golder and AMEC characterization data available for the open pit as well as the Brenna and WML formation material from other borrow areas on site (Okane, 2020a). OVB from the open pit was excavated using a large hydraulic open-faced shovel and stockpiled in varying areas within the EMRS for use in progressive reclamation.

The initial review of material properties for both Brenna and WML OVB materials indicated either material would be suitable for use as NCL and for construction of the CCL to meet hydraulic conductivity objectives. However, the use of both materials or a combined material during construction has proven more challenging, as each material has a different optimum water content (OWC) and target compaction range, requiring involved CQC / CQA effort.

2.1.3 *Geotechnical Stability*

Given the high plasticity of the WML material, and possibility of formation of slickenside surfaces on a slope, a geotechnical analysis was completed to assess the veneer stability using Brenna and WML materials in the cover system construction (Okane, 2020b). Available information for Brenna and WML materials indicated these materials have equivalent remolded strengths, and a single set of simulations were run to represent the material properties of both materials for the purposes of stability. Results indicated that for the geometries of the lower EMRS bench slopes (including 4H:1V, 5H:1V, and 7H:1V slopes) under base case conditions, minimum factors of safety for long-term stability were met. However, sensitivity analysis for the 4H:1V slope geometry indicated that under elevated moisture

conditions, long-term factors of safety would not be met, emphasizing the importance of quality control and assurance in minimizing saturated materials during construction.

2.1.4 *Field Compaction Testing*

Field compaction trials were conducted in June 2020 as described in (Okane, 2020c). Results of the testing program show that the materials representative of those used during the trials could be successfully incorporated into a CCL with a hydraulic conductivity less than or equal to the design value. Key learnings and considerations for full-scale construction included:

- Importance of material control processes for optimization: implementing material identification and selection controls at source, preparation of material to achieve target water content, and removal of organic and oversize materials;
- Loose lift placement: pushing material downslope with a dozer likely preferred placement method, undulating waste rock surface facilitated loose lift placement, but resulted in variable layer thickness, and high-resolution topographical survey recommended;
- Compaction methodology: at suitable water contents, four passes of the 11 tonne sheepsfoot roller using maximum vibratory action was sufficient to achieve 95% compaction, 1/3 overlap recommended, and a compactor towed behind a dozer may provide an increased level of safety and reliability on the sloped surface; and
- Field testing: a detailed CQC program is required for full-scale construction, techniques that may be employed for determining material compaction characteristics include subjective assessment, one-point compaction tests, three-point compaction tests, and test pads.

The addition of compaction trials for CCL lifts occurred during the 2021 season to assess if two passes with the sheepsfoot roller resulted in adequate compaction results of 95 percent or greater. Due to the return of utilizing four passes with the sheepsfoot roller during 2022 cover construction, no compaction trials were deemed necessary by CQA.

2.1.5 *EMRS Cover System Operational Handbook (Technical Specifications)*

Okane continues to update the EMRS Cover System Operational Handbook, referred to herein as the Technical Specifications, with increased confidence in material characteristic (dry density, clay content, and hydraulic conductivity) relationships and in response to changing field conditions using field testing and laboratory data results, as appropriate. The latest updates in July 2021 included updated water content specifications, additional density and hydraulic conductivity protocols, and specifications for out of tolerance CCL.

Summary sheets of testing frequencies and tolerances, and construction specifications along with a materials selection guide were developed to accompany the Technical Specifications. These documents are specific to the progressive reclamation cover system construction on the EMRS using the OVB material sourced from the open pit and focus on providing clear and concise guidance for construction activities and CQC / CQA practices. The Technical Specifications were developed using available material characterization to ensure the constructed cover system will meet performance and design criteria, including geotechnical stability and hydraulic conductivity requirements of the CCL.

It should be noted in some cases results of material testing may not meet specification, but still be suitable for use in construction, at the discretion of CQA. The full Operational Handbook is included in Appendix A. Key specifications, tolerances, and testing frequencies are summarized below.

2.1.5.1 EMRS Waste Rock Surface

Technical specifications for the EMRS waste rock surface include:

- Relatively dense and uniform foundation for the cover system, with minimal open void and no large protruding rocks;
- Surface prepared to design specifications, and prepared to the satisfaction of CQC; and
- Approved surface shall be surveyed as a record of construction.

2.1.5.2 Compacted Clay Layer (CCL)

Technical specifications for the CCL include:

- Material must be free of deleterious material such as organics and oversize materials (>0.250 m);
- CCL shall be compacted to 95% of the maximum dry density, at a moisture content within -2 / +4 percentage points of OWC;
- Nominal CCL thickness shall be 0.5 m to a tolerance of -0.1 m / +0.2 m, constructed in two lifts of 0.25 m to a tolerance of -0.1 m / +0.2 m;
- Approved areas of the CCL shall not be left exposed longer than 24 hours; and
- Material should have a minimum plasticity index of 10.

2.1.5.3 Non-compacted Layer (NCL)

The technical specifications for the NCL include:

- A minimum total thickness of 1.0 m, constructed in minimum two lifts to allow for track compaction; and
- Water content of NCL materials should not be greater than two percentage points wet of *in situ* water content at placement.

2.1.5.4 Placement and Compaction

The technical specifications related to placement and compaction of the cover system include:

- If dry density variance from additional compaction trials is no greater than 5% the area can be considered compacted and approved. If the variance in the area is found to be greater than 5% the entire panel must be re-compacted to the minimum number of passes required to fall below the 5% variance in dry density.

3 2022 CONSTRUCTION SEASON SUMMARY

This section summarizes the progressive reclamation cover system construction activities that took place on the EMRS during the 2022 construction season. Construction began May 23, 2022 and concluded on August 2, 2022. High volumes of precipitation throughout the 2022 season often resulted in high moisture contents and periods where cover material was unworkable. Additionally, the large quantity of rainfall led to a stoppage of cover system construction in June while New Gold resources were relocated to the TMA. Approximately 1.6 ha of cover system was constructed during 2022.

3.1 Cover System Construction Roles and Responsibilities

During the 2022 construction season, New Gold constructed the cover system and managed site operations, Tulloch performed CQC testing and laboratory services, and Okane was responsible for CQA and technical guidance (Figure 3.1).

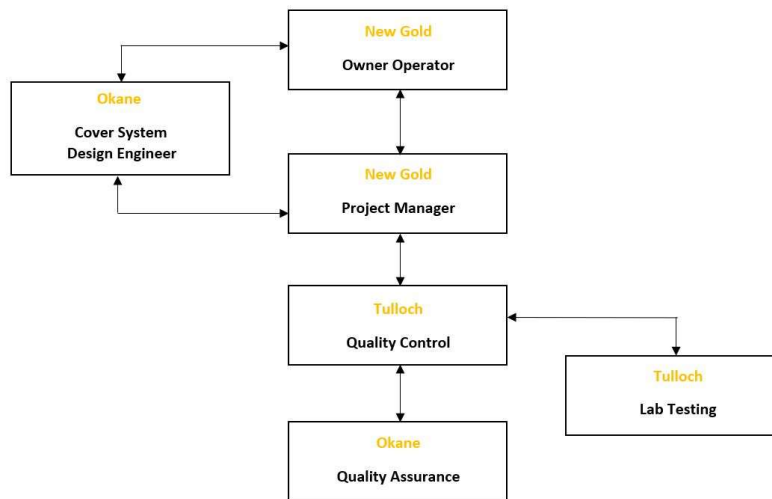


Figure 3.1: Cover system construction responsibilities

Specific responsibilities of each group were as follows:

New Gold, Owner Operator and Project Manager

- Provided equipment, personnel, and materials required for surface preparation and cover system construction;
- Managed site logistics, including coordination of material management and preparation;

- Provided the CQC and CQA full cooperation in sample taking or conducting tests at their discretion and render such assistance as necessary to enable sampling and testing to be carried out in a timely manner;
- Allowed sufficient time for the CQC and CQA to carry out the required test work in order to determine the acceptability of the placed materials;
- Surveyed the waste rock surface to confirm that the landform conforms to EMRS design specifications and is ready for reclamation; and
- Provided final sign off on daily reports (Tulloch reports no longer signed by New Gold. The signature box was left on Tulloch daily reports for New Gold following the July 5th project update meeting to still have the option of future signatures).

Tulloch, Construction Quality Control (CQC)

Verification of quality, through inspection and testing

- Surveyed the waste rock surface as a check and as a record of construction to allow for the determination of proper cover system layer thicknesses in all areas;
- Inspected and approved that the waste rock surface met technical specifications for cover system placement;
- Carried out material control tests on materials in excavations and stockpiles prior to compaction to determine the adequacy of the materials for use in the cover system construction as per the Technical Specifications;
- Identified the appropriate compaction curve for the material used in each section of the CCL by performing a subjective assessment (based on materials selection guide and site experience with the materials). When uncertain of which curve to apply, requested a new standard proctor test and/or utilized supplemental techniques to facilitate selection of the compaction curve, such as one-point proctor compaction tests, three-point proctor compaction tests, or test pads;
- Verified that appropriate construction techniques were used in cover system construction, as outlined in the Technical Specifications (compaction energies applied to CCL, equipment used, surface preparation, CCL exposure times, loosening of NCL, etc.);
- Verified lift thicknesses were within tolerances outlined in the Technical Specifications;

- Conducted record tests on the materials in the completed portions of the CCL following placement and compaction to confirm the adequacy of the work, and to provide an as-built record of the workmanship achieved;
- Approved panels of CCL, given the panels met the Technical Specifications with support from CQA when required;
- Documented activities, observations, samples collected, tests completed, compaction curves selected, as well as approval of any CCL panels in the daily summary report. Provided summary notes and relevant data to CQA personnel on a daily basis;
- Collected as-built surveys of each lift within the cover system for thickness verifications, quantities, and as-built documentation; and
- Analysis of laboratory samples as provided by CQC or CQA.

Okane, Construction Quality Assurance (CQA) and Cover System Design Engineer
Proactive defect prevention, with a focus on the process for managing quality

- Conducted inspections, audits, and review of all work conducted and approved by CQC. It is at the discretion of CQA to provide final approval for completed panels of the cover system construction;
- Reviewed results of CQC testing. CQA's assessment of test results will be final and conclusive in determining compliance with the Technical Specifications;
- Provided technical support and guidance to CQC in selection of appropriate compaction curves for construction of the CCL, and provide clarifications of the Technical Specifications, as needed;
- Applied correction of water content lab results to field densometer results;
- Performed in-situ hydraulic conductivity testing on the CCL as part of the record testing prescribed in the Technical Specifications, and through audits to confirm the hydraulic conductivity of the CCL is within acceptable range in varying material types;
- Requested additional testing above the minimum outlined in the Technical Specifications, as required to satisfy confidence in cover system construction;
- Reviewed test results considered to be a 'failure' as per the Technical Specifications and confirmed the materials suitability within the CCL with a focus on *in situ* hydraulic conductivity;

- Conducted a laboratory quality check through the comparison of results from samples sent to an external laboratory to results from the on-site laboratory;
- Modified the testing and rates of testing prescribed in the Technical Specifications, and otherwise make modifications to reflect changing conditions, as appropriate;
- Provided a comprehensive Record of Construction Report documenting cover system construction and CQC / CQA activities which occurred during the 2022 construction season.

3.2 Scope of Construction

The scope of construction involves placement of an engineered closure cover system over the mine rock on the lower bench slopes of the EMRS deemed ready for progressive reclamation. The closure cover system consists of a 0.5 m CCL overlain by a 1.0 m NCL to achieve a minimum 1.5 m total thickness. These lifts are to be constructed as per the Technical Specifications (Okane, 2021b). New Gold provided the equipment and operators during 2022 construction activities.

3.2.1 Safety and Environment

A lone safety incident occurred during the shortened 2022 construction season. On August 2nd an equipment fire in the pit resulted in an emergency stand down on site for approximately one hour. The all clear was given at 8:30 am and cover system construction was able to resume.

The main safety aspect observed during 2022 cover construction was the common sightings of bears. With cover system placement shifting to the East side of the EMRS, workers and equipment were in closer proximity to the Richardson landfill on Teeple road. This resulted in frequent bear sightings; however, the bears kept their distance from the EMRS slopes and remained near the tree line.

No environmental incidents were observed during cover construction on the EMRS in the 2022 season.

3.2.2 Equipment Used

Equipment used on this project included two CAT D8T dozers, a CAT 349 excavator, a Link-Belt 350 excavator, a Link-Belt 700 excavator, and a CAT CP56B sheepsfoot vibratory soil compactor. 100 and 45 tonne haul trucks were utilized for the transportation of material during the 2022 construction season.

Both CAT D8T dozers are equipped with GPS blade control to increase proficiency in determining lift thicknesses of the CCL and NCL. Issues with the GPS blade control system were greatly mitigated from seasons past due to the addition of a repeater on the east side of the EMRS.

3.2.3 Naming Convention

The use of the common naming convention (Okane 2021 a) for documents was continued into the 2022 season to promote consistency from year to year. The continued use of the naming convention helped to facilitate organization and streamline data filtering for the large amount of documentation associated with cover construction.

The continuation in numbering for panel codes, field samples, and nuclear densometer testing from 2021 construction allowed all parties to accurately reference aspects of the cover system construction for both current and previous seasons.

3.3 Construction Completed in 2022

The overall area of the lower EMRS slopes that was completely covered and surveyed during the 2022 construction season was 1.59 ha of CCL and 1.60 ha of NCL. 96.88% of CCL placement and 93.98% of NCL placement fell within tolerances (Table 3.4). A breakdown of panel completions dates is included in Table 3.1, as well as monthly summaries in Sections 3.3.1 through 3.3.4.

Table 3.1: Panel completion dates.

Completion Date	Panels Completed
July 10, 2022	P30
July 21, 2022	P31
July 30, 2022	P32
August 2, 2022	P33

3.3.1 May Summary

Cover system construction began on May 23rd following changes to the previously proposed start date of May 1st due to poor weather and cracking being identified on the initial planned reclamation area. In May, a low of 2°C and a high of 24°C were recorded during construction. 17 occurrences of rain totalling 223.1 mm were recorded for the entirety of the month.

Pre-emptive stockpile sampling of potential borrow areas was completed by Tulloch prior to Okane's mobilization to site. This sampling allowed for a more detailed understanding of the

stockpiled material available for cover construction and gave CQC representative proctor values for nuclear density testing.

Construction initiated on the east side of the EMRS with P30 at stationing 0+783 and progressed south further down chainage. Material from the central borrow area was utilized for P30 CCL construction to avoid the high rock content identified within the southern borrow area near P29. OVB material was used to construct two compacted 0.30 m lifts (Okane 2021c). For each lift, material from the central stockpile was spread over the slope of the waste rock by dozers. Each lift was compacted with four passes of a sheepsfoot roller (minimum 1/3 overlap). Vibratory action was determined to be disadvantageous in current conditions, as material appeared moist and did not require excess moisture being brought to the surface. Small amounts of frozen material were visible throughout P30 CCL construction, but the material was given adequate time to melt during the handling and placement process.

During May, Panel 30 was initiated but not completed. Overnight rain on May 23rd caused the previously placed L1 material to be oversaturated and have areas of standing water. While the material was given time to dry, New Gold made the decision to extend the width of P30 to the total approved area of 90 m to continue L1 placement and limit down time. As a result, P30 CCL was tested in two halves to enable construction of subsequent lifts on the approved southern half while compaction and testing was still in progress on the northern half of the panel.

Due to the increased panel size and worker shortage, areas of P30 L2 achieved a level of surface desiccation which was of concern during the placement of L3. As there was no availability to wet the material prior to coverage it was determined the best available course of action was to cover L2 with a reduced NCL lift of moist pliable material. This area was flagged for borehole permeameter testing to ensure that adequate hydraulic conductivity was still achieved. Further rainfall starting on May 29th during L3 placement aided in rehydrating the still exposed areas of L2, but eventually resulted in very wet conditions and ponding water on P30 L2 and L3 following a three-hour lightning proximity work stoppage. With rain occurring until month's end there was no opportunity for the placed material to dry and no further cover construction was completed for the month of May.

At the end of May, P30, L3 was still in progress with areas of L2 still exposed.

3.3.2 June Summary

During June, a low of 3°C and a high of 27°C were recorded while CQA was on site. 20 occurrences of rain totalling 201.3 mm were recorded for the entirety of the month. No cover construction was completed in June due to weather and priority construction required in the TMA.

Following periods of heavy rainfall starting in May, material was given time to dry as standing water was still visible within P30 L2 and L3 on June 1st. During the drying period, New Gold relocated equipment and workers to the TMA while warm temperatures and moderate winds aided in the drying of material. On June 3rd Okane met with New Gold to discuss the return to construction given improved conditions on the EMRS. With the workforce and equipment still required at the TMA it was relayed that no cover construction would be able to resume prior to June 6th. As a result, CQA noted that rework would be required to the exposed portions of P30, L2 as the still exposed areas of CCL would have concerning levels of desiccation upon returning to construction.

CQA remained on site to monitor the level of desiccation until June 14th when Okane was notified that New Gold would not be able to return to cover construction until July 1st due to priority work in the TMA. Following this information stockpile sampling was completed by Tulloch in preparation for restarting in July and Okane demobilized from site on June 15th.

Okane mobilized to site on June 30th in preparation for construction and performed several spot checks on the exposed areas of P30, L2. These spot checks found the depth of desiccation to extend approximately 0.15 m from the surface. Based on the spot checks, Okane made the recommendation of skimming the exposed areas of P30, L2 and the adjoining edges of L3 to a level of 0.4m and placing new material to bring the lift back to 0.6m (Section 4.2).

At the end of June, P30 was still in progress with rework required upon resuming construction in July.

3.3.3 July Summary

During July, a low of 9°C and a high of 33°C were recorded, along with 16 occurrences of rain totaling 209.9 mm. Cover system construction resumed on July 1st with rework of P30 CCL and continued further south down chainage until the completion of P33, L3 at months end.

July 1st marked the return to cover construction and the completion of rework on the exposed areas of P30. Following the completion of the June spot checks, Okane met with New Gold and Tulloch to discuss the extent of the rework. Okane reiterated the recommendation of skimming P30, L2 and the adjoining edges of L3 past the point of the desiccated material (depth above waste rock of 0.45 m) and replacing the removed material with new CCL quality material from one of the borrow areas before recompacting. Opposed to bringing in new material, New Gold was comfortable skimming and reworking P30, L2 with the material present on the slope and utilizing hydraulic conductivity for the purpose of final approval.

During the rework of P30, L2, dozers were utilized to skim the top layer of material and mix it with the surrounding material. Following the mixing of material, CQA requested CQC complete a moisture check with the nuclear density gauge prior to compaction to ensure the optimum moisture content of 20.6% (based off corresponding proctor) was achieved. A resulting moisture content of 21% was achieved and compaction of the reworked material was initiated utilizing vibratory action to aid in bringing moisture to the surface. Small areas containing scattered dry spots amongst moist pliable material were noted during the compaction process by CQA. As a result, CQA requested that nuclear density test number 488 be completed amongst the largest of these areas (approximately 6' x 10') where a testing surface could be made. Test D488 was completed on the edge of this area and yielded a moisture content of 26.4%. Upon further inspection the dry spots contained moist pliable material beneath the surface and the area was flagged as the location for hydraulic conductivity testing for the purpose of final approval. To further rehydrate P30, L2 the recommendation of ensuring moist pliable material was utilized during the remaining L3 placement was made by CQA.

Following the completion of P30, the panel widths were decreased to match that of the 2021 season to limit the possibility of further rework due to CCL lifts not being able to be covered in a reasonable amount of time. Subsequent panels were constructed at a target width of 30m. Following the change in panel width and frequent occurrences of rainfall during the month of July, the desiccation of CCL material was a nonissue for the remainder of the 2022 season. Although the frequency of rain aided in eliminating dry conditions it often resulted in construction stoppages due to material needing time to dry to reach a workable moisture content.

Hydraulic conductivity testing was also hindered due to precipitation levels in the month of July. EMRS_BP_P30_L2_B27_220714 and EMRS_BP_P30_L2_B28_220714 were installed to ensure adequate hydraulic conductivity was achieved within areas of P30, L2 where desiccation had reached levels of concern prior to coverage and where P30, L2 was reworked following the stoppage in construction. During the testing period, EMRS_BP_P30_L2_B27_220714 was interrupted during a period of heavy rainfall and was not restarted due to pooling water surrounding the borehole casing. This pooling water resulted in water levels increasing within the reservoir of EMRS_BP_P30_L2_B28_220714 during the testing period. This increase resulted in inaccurate values being represented and resulted in both tests being terminated and classified as inconclusive. Subsequent excavations were completed adjacent to boreholes 27 and 28 for retesting of the areas. EMRS22_BP_P30_L2_B29_220721 and EMRS22_BP_P30_L2_B30_220722 were installed within the new excavations which were extended downslope to achieve positive drainage of future rainfall away from the equipment. Further rainfall occurred during the time boreholes 29 and 30 were installed resulting in the testing period being extended in an attempt to achieve representative results.

During NCL placement in July, it became apparent that achieving effective drainage off the cover system would not be as simple as previous areas of construction due to the presence of a topsoil berm located at the toe. The elevation of this berm was found to be greater than the final NCL elevation and increased further down chainage through panel construction. This resulted in modifications to NCL placement to avoid ponding water. It was determined that the best course of action was to extend the NCL further past the key trench during L4 placement and regrade the topsoil so that any runoff would pool within the topsoil opposed to within the limits of the cover system.

Cover system construction progressed south further down chainage through to P33 at an end stationing of 0+600 with frequent delays due to continued rainfall events. On July 29th Okane was notified that construction would no longer proceed past July 31st. At this point, P33, L2 had been completed and P32, L4 and P33, L3 were in progress.

At the end of July, P33, L4 was still in progress due to weather further hindering construction. As a result, the decision was made to progress construction into August to complete P33 NCL prior to ending construction for the season.

3.3.4 August Summary

During August, a low of 14°C and a high of 25°C were recorded while CQA was on site. 10 occurrences of rain totalling 74.9mm were recorded for the entirety of the month.

Following the drying and track packing of material to the point where it was workable, the final placement and grading of P33, L4 was completed on August 2nd. Final inspections along the toe were performed to ensure no water was visibly pooling within the limits of the cover. With the topsoil berm cut back and the NCL extended further past the key trench for P30 to P33, adequate drainage off the cover system was achieved.

EMRS22_BP_P30_L2_B29_220721 and EMRS22_BP_P30_L2_B30_220722 were removed and the subsequent excavations were filled in while the necessary equipment was still on the EMRS. Despite the extension of excavations to aid with drainage the influence of rainfall was again present in results. Based on the influence of rainfall during the testing periods as well as equipment issues, both EMRS22_BP_P30_L2_B29_220721 and EMRS22_BP_P30_L2_B30_20220722 were again classified as inconclusive and subsequent hydraulic conductivity testing of P30 is still required.

Following the completion of P33, L4 and the removal/backfill of the hydraulic conductivity testing locations, the 2022 EMRS construction season was concluded and Okane demobilized from site.

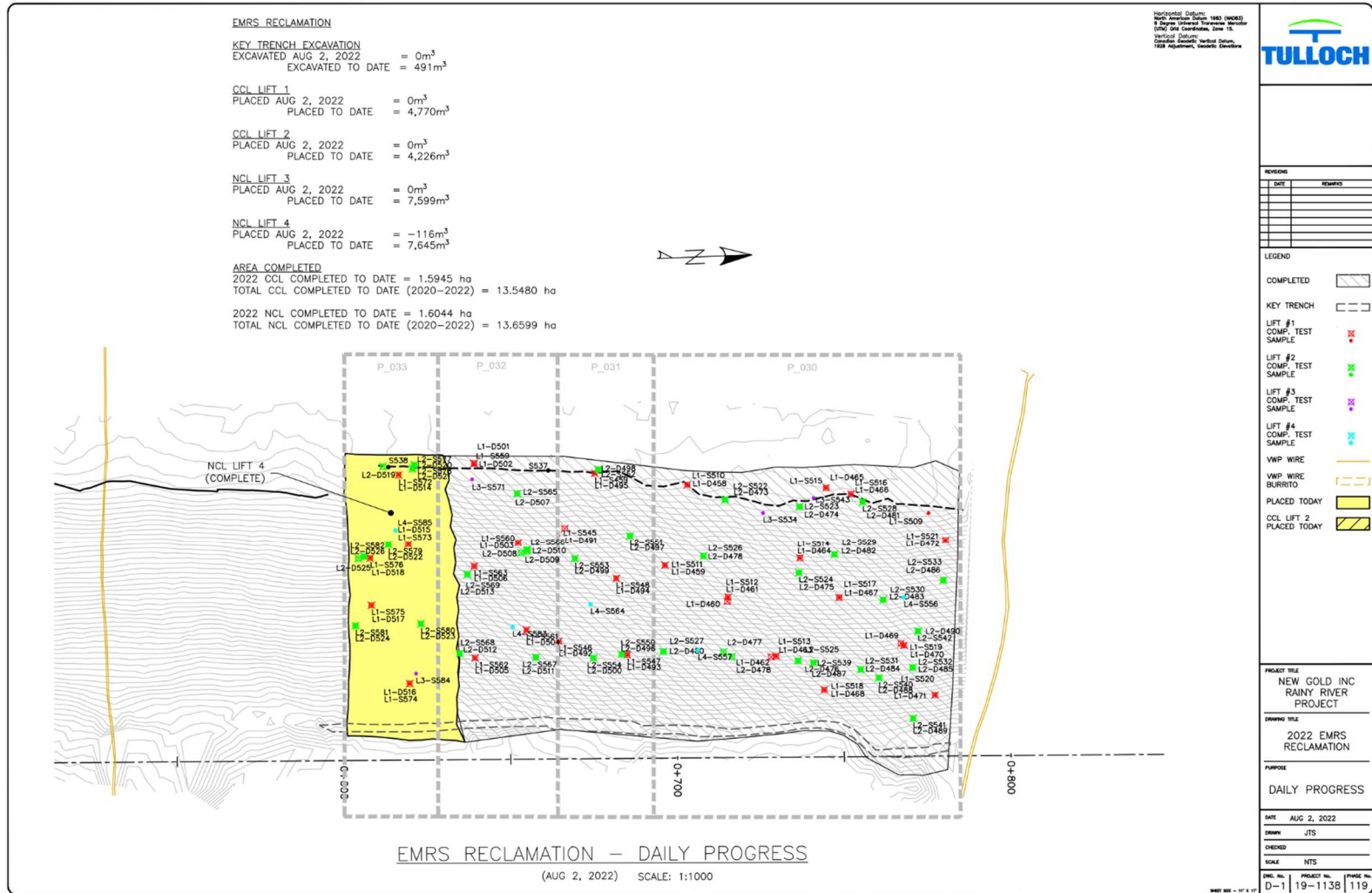


Figure 3.2: Overview of cover system constructed during 2022 (from Tulloch, 2022a).

3.3.5 Material Placement Details

The total as-built volume of NCL and CCL material placed during the 2022 construction season, as reported by Tulloch (2022a), was 24,240 m³ (Table 3.2). To date, 55,411 m³ of CCL and 93,049 m³ of NCL have been placed (Tulloch, 2022a).

Table 3.2: Material placement volumes.

Lift	P30	P31	P32	P33	Total Material Volume Placed
Lift 1 CCL	2,379 m ³	845 m ³	811 m ³	735 m ³	4,770 m ³
Lift 2 CCL	2,205 m ³	613 m ³	788 m ³	620 m ³	4,226 m ³
Lift 3 NCL	3,595 m ³	1,318 m ³	1,482 m ³	1,204 m ³	7,599 m ³
Lift 4 NCL	3,744 m ³	1,193 m ³	1,476 m ³	1,232 m ³	7,645 m ³
Key-in Trench	347 m ³	118 m ³	65 m ³	74 m ³	604 m ³
Totals	12,270 m ³	4,087 m ³	4,622 m ³	3,865 m ³	24,844 m ³

Tulloch, 2022a

Okane noted a discrepancy in key trench “excavated to date” totals within Tulloch’s daily placement maps (Appendix C) for the 2022 season during end of season review. On July 15th, 118m³ (Tulloch 2022a) of key trench excavation was shown to be completed for P31, but the resulting total was only increased by 5 m³ (347m³ to 352m³). Table 3.2 represents the total key-in trench volume based on the full inclusion of the P31 key trench. Further investigation is required by Tulloch to confirm the final key-in-trench volume for the 2022 season.

Approximate area calculations per month were created using Tulloch’s daily placement maps along with a panel approval log maintained by CQA. A summary of the EMRS area covered per panel is shown in Table 3.3. The total area of placement for the 2022 season was 1.59 ha of CCL and 1.60 ha of NCL.

Table 3.3: EMRS area covered.

CCL/NCL	P30	P31	P32	P33	Total Area Surveyed
CCL	0.7913 ha	0.2593 ha	0.286 ha	0.2579 ha	1.5945 ha
NCL	0.8037 ha	0.2119 ha	0.3433 ha	0.2455 ha	1.6044 ha

Tulloch, 2022a

3.3.6 2022 Lift Thicknesses

Continuing to utilize detailed survey data provided by Tulloch, Okane compared EMRS lift points against the waste rock surface to create an as-built summary report (Appendix G) within Infrakit for the entirety of the 2022 season. As a result of continuing to construct CCL lifts at a targeted thickness of 0.3 m, the vast majority of as-built points for CCL construction fell within tolerance and are shown in table 3.4.

Table 3.4: 2022 lift thicknesses.

Lift	Tolerances	Within Tolerance	Under Tolerances	Over Tolerance
Lifts 1 & 2 – CCL	0.4 m - 0.7 m	96.9%	0.7%	2.4%
Lifts 3 & 4 – NCL	1.4 m - 1.7 m	94.7%	3.6%	1.7%

3.3.7 Preparation of the Mine Rock Surface

During the 2022 construction season the waste rock was graded and smoothed in preparation for CCL placement. Once the area was approved by Mine Operations and the surface was deemed suitable by CQC, a survey of the waste rock surface was completed in a 5'x5' grid to generate an original ground surface for placement of the CCL.

Issues with the waste rock surface at the crest of the panels became a frequent occurrence throughout the 2021 season. This issue was a result of Tulloch not being able to survey the waste rock in areas of the crest due to the stockpiled material in those locations. To prevent this issue from reoccurring, material was hauled from separate borrow areas within the EMRS to the placement area during the 2022 season. This adjusted methodology allowed for the accurate survey of the entire waste rock surface within the panel boundaries prior to the placement of CCL material. As a result of the new methodology no delays were noted due to the need to complete spot checks or remove placed material to create updated surfaces in 2022.

Material placement during the 2022 season began with P30 at stationing 0+783 and progressed south throughout the entirety of cover construction. Throughout the season the sections of waste rock south of the current panel were assessed by CQC. Based on the results of these inspections, further grading and smoothing was often completed by New Gold construction to ensure an adequate surface prior to material placement. This process continued throughout cover construction until the completion of P33 where construction ended at a stationing of 0+600.

3.3.8 Compacted Clay Layer (CCL)

OVB from the open pit was excavated using a large hydraulic open-faced shovel and stockpiled at various borrow sources within the EMRS for use in progressive reclamation. Haul trucks were utilized to transport material from these locations to the current area of panel construction during the 2022 season. The borrow locations utilized in CCL construction during 2022 were:

- Central stockpile – Large stockpiled area of material at approximate stationing 1+234, O/S -675.1. Material in this area was previously utilized in cover construction during the 2021 season;
- Northern Stockpile – Material at approximate stationing 1+323, O/S -280. Material at this location was initially intended for use for a separate environmental project but was reallocated when construction of the separate project was postponed; and
- Southern Stockpile - Stockpiled borrow area located north of panel 29 on the EMRS at approximate stationing 0+434, O/S -111m. Due to the visibly high stone content of varying gradations, this stockpile was mostly utilized for NCL construction upon CQA's recommendation. Small areas within the stockpiles with a lowered stone content were pre-emptively sampled by CQC and deemed suitable for CCL use based on subsequent test results.

A combination of visual analysis by CQA/CQC and stockpile samples were completed pre-emptively at each borrow source to help determine the suitability of the stockpiled material prior to use in panel construction. Where material was deemed unsuitable for use in CCL construction, it was left for use in subsequent NCL lifts.

Throughout the 2022 construction season, the OVB material was used to construct two compacted 0.3 m lifts (Section 4.2). For each lift, material from the borrow location was spread over the slope of the waste rock with a dozer to achieve a nominal loose lift thickness of ~0.35 m. Each lift was compacted with four passes of a sheepsfoot roller (minimum 1/3 pass overlap). The objective of the sheepsfoot roller was to knead the OVB and ensure that the required soil density was achieved and to create a cohesive, homogeneous layer. Vibratory action with the roller was determined to be disadvantageous with the material conditions for the majority of the 2022 season, as excess water brought to the surface of the soil during vibration rendered it unworkable. The use of vibratory action was reassessed upon each CCL lift but was only implemented during the rework of P30, L2 as it was deemed beneficial to bring excess moisture to the surface in that instance. Following the rework of P30, L2, vibratory action was not utilized due to the large amount of rainfall during the construction window.

During compaction of CCL lifts during the 2022 season, New Gold decided to return to utilizing four passes with the sheepsfoot roller. As a result of returning to the initial compaction methodology there was reduced need for the use of compaction trials to confirm adequate compaction. While compaction trials were no longer necessary to prove adequate compaction had occurred with two passes of the sheepsfoot, they remained a useful quality assurance method to be utilized at CQA's discretion in the event:

- A representative proctor was not used.
- Testing results did not meet specifications.
- A visible change in material was noted.

The above conditions did not occur during the 2022 construction season due to extensive stockpile sampling and thorough sorting of material during the handling and loading process of CCL material. As a result, no compaction trials were deemed necessary by CQA as placement occurred with fairly homogeneous material with corresponding proctor values from locations within the borrow sources.

After compacting each lift, CQC testing was performed to confirm the completed area met minimum compaction requirements for the material and surveyed to confirm appropriate lift thicknesses were achieved. In the event the Technical Specifications for compaction were not met, additional material characterization assessment was performed by CQA to gauge the quality of material and ensure a level of confidence that the compaction criteria were appropriately classified, and that the material water content was in an acceptable range. If there was any question the placed material may result in the hydraulic conductivity not meeting specification, the area in question was flagged for borehole permeameter testing prior to final approval.

Technical specifications indicate the CCL should be covered within 24 hrs to prevent desiccation. Due to varying weather conditions throughout the 2022 construction season, this timeline was shortened or increased when deemed appropriate by CQA. Additional testing and inspections were completed on areas that were left exposed to confirm suitability before subsequent layer placement. During the placement of P30, L3 the underlying CCL layer began to exhibit levels of desiccation below the sheepsfoot divots on May 29th. With no means to wet the exposed areas of L2 prior to coverage, the best available option was to continue L3 placement with moist pliable material in an attempt to rehydrate the CCL below and flag the area for hydraulic conductivity testing. L3 placement continued in this manner until May 30th when rain, which initially aided in rehydrating the exposed areas of P30, L2 became too much and resulted in the material moisture contents increasing past the point of workability. Subsequent rain until month's end resulted in the construction crew and equipment being moved to the TMA while the material was given time to dry. During this period, priority

construction within the TMA led to a stoppage of EMRS construction until July 1st in which the exposed areas of P30, L2 reached a level of desiccation where rework of the previously approved CCL was required. Based on inspections completed by CQA upon returning to site, it was determined that the level of desiccation had reached an approximate depth of 0.15m. Following these inspections Okane recommended the removal of desiccated material down to the level where suitable material could be reached for the exposed areas of P30, L2 and 1.0m into the adjoining areas of L3 for adequate tie in before hauling new material for placement and compaction. Opposed to bringing in new material, New Gold was comfortable skimming and reworking P30, L2 with the material present on the slope and utilizing hydraulic conductivity for the purpose of final approval.

Lift thicknesses were field verified by Tulloch during construction with the subsequent heat maps for both CCL and NCL being sent out in the following days. The continued construction methodology of a targeted 0.60 m CCL thickness resulted in minimal low areas represented in the heat maps. Any areas represented as below 0.40m (Tulloch 2022b) on the final heat maps were located past the key trench where the cover system was extended into the topsoil berm to allow for adequate drainage and avoid pooling within the extent of the cover system.

3.3.8.1 Compacted Clay Layer Key-in Trench

The CCL was extended and used to backfill the cover system key-in trench, forming a continuous liner. The CCL material was placed in two lifts, compacting as best as reasonably possible with appropriate equipment. All key trenching completed during the 2022 construction season reached bedrock or suitable tie in material prior to the maximum excavation depth of 3m. In areas where bedrock outcrops occurred at the base of the slope, the CCL was formed over and blended into the bedrock formation to the final slope configuration.

Due to safety concerns expressed during the 2021 construction season regarding access to the trench for surveying where the depth of excavation exceeded 1.0 m it was noted that no worker should enter the trench and that CQA would accept a survey along the top of the key-in trench with a corresponding estimated depth. All vegetation was removed prior to the CCL and subsequent NCL being placed on any natural ground. Table 3.5 outlines the key-in trench details for the construction season.

Table 3.5: Key-in trench summary.

Panel	Location	Date	Comment
30	0+783 – 0+690 (93m)	24-May-22	Key trench dug to bedrock at varying depths at the north end of the key trench. As bedrock tapered out the trench was dug to approximately 2.0m where suitable tie in material was reached. Bedrock was reached again at the south end of the trench where it was terminated.
31	0+690 – 0+661 (29m)	05-July-22	Key trench dug to varying depths throughout the width of the panel with bedrock being reached consistently throughout. The depth of excavation became shallower while the trench progressed south as the elevation of the bedrock increased.
32	0+661 – 0+630 (31m)	13-July-22	Key trench dug to bedrock at varying depths except for an approximately 6.0m long stretch where suitable tie in material was reached.
33	0+630 – 0+600 (30m)	17-July-22	Bedrock reached throughout the entirety of the key trench.

3.3.9 Non-Compacted Layer (NCL)

OVB material for the NCL was primarily sourced from the southern borrow area which visual inspections and pre-emptive stockpile sampling showed to contain an increased rock content compared to other available borrow sources. Due to the amount of sorting which would be required to utilize this borrow area for CCL construction the recommendation was made by CQA to prioritize this area for use in NCL. When available live hauling from the pit was also used during NCL construction in small quantities.

After approval of a CCL section, material was hauled from the southern borrow area and spread in two lifts of approximately 0.45 m – 0.55 m to achieve a nominal cover system thickness of 1.5 m. The variability in NCL thickness is a result of the NCL being placed to achieve the nominal cover thickness of 1.5 m based on the corresponding CCL depth below. Each layer was surveyed to confirm that the total minimum layer thicknesses had been achieved. An estimated 15244 m³ of NCL material was placed in 2022 (Tulloch, 2022a).

The presence of a topsoil berm at the toe along the east side of the EMRS from stationing 0+793 to 0+562 resulted in difficulty achieving effective drainage off the cover system due to the elevation of the berm being greater than that of the final NCL lift. In order avoid pooling water within the limits of the cover system L4 was extended beyond the key trench and blended into the topsoil. A further breakdown of the change in methodology is located in section 5.1.2.

3.3.10 CCL and NCL Laboratory Testing Frequencies

A summary of the laboratory testing completed during the 2022 construction season and the associated frequencies is provided in Table 3.6 and 3.7. Material sampling and laboratory testing frequencies for the material during construction are prescribed in the Technical Specifications (Okane, 2021b) and included for reference in Table 3.7. These are the minimum requirements, and additional testing is often required and / or recommended to account for changes in material texture, and at the discretion of the CQA.

Due to the occasional occurrence of large variances between lab and field moisture content results, the frequency of water content testing being completed at a 1:1 ratio with nuclear densometer testing remained necessary throughout the 2022 season. This resulted in the minimum prescribed frequency of gravimetric water contents at 1 per 1,000 m³ being greatly exceeded throughout construction.

It is noted that the prescribed testing frequencies for NCL hydrometer testing were not met during the 2022 construction season (Table 3.7). Due to testing above the minimum prescribed frequency during the 2021 construction season, the frequency of hydrometer testing within NCL lifts for reclamation as a whole still exceeds 1 per 3000 m³. While frequencies as a whole are within the technical specifications, emphasis is placed on CQC performing the necessary sampling based on estimated panel volumes to avoid testing falling below the prescribed minimums.

Table 3.6: Summary of laboratory testing.

Laboratory Test	No. of Tests Completed (April 2022)	No. of Tests Completed (May 2022)	No. of Tests Completed (June 2022)	No. of Tests Completed (July 2022)	No. of Tests Completed (August 2022)	No. of Tests Completed (Total)
<i>CCL Materials</i>						
Gravimetric water content (ASTM D2216-19)	0	25	0	35	0	60
Atterberg Limits (ASTM D4318-00)	0	6	0	6	0	12
Particle Size Distribution – Hydrometer (ASTM D6913M-17, D7928-17)	0	6	0	6	0	12
Standard Proctor (ASTM D698-12e2)	0	2	0	2	0	4
<i>NCL Materials</i>						
Gravimetric water content (ASTM D2216-19)	0	1	0	8	1	10
Particle Size Distribution – Hydrometer (ASTM D6913M-17, D7928-17)	0	1	0	3	0	4
<i>Stockpile Samples</i>						
Gravimetric water content (ASTM D2216-19)	7	3	4	3	0	17
Atterberg Limits (ASTM D4318-00)	7	3	4	0	0	14
Particle Size Distribution – Hydrometer (ASTM D6913M-17, D7928-17)	7	3	4	0	0	14
Standard Proctor (ASTM D698-12e2)	7	3	4	3	0	17

Table 3.7: Summary of laboratory testing frequencies.

Laboratory Test	Prescribed Testing Frequency ¹	Actual Testing Frequency (2022 Season)
Gravimetric water content (ASTM D2216-19)	1 per 1000 m ³	6.7 per 1000 m ³
Atterberg Limits (ASTM D4318-00)	1 per 1000 m ³	1.3 per 1000 m ³
Particle Size Distribution – Hydrometer (ASTM D6913M-17, D7928-17)	1 per 1000 m ³	1.3 per 1000 m ³
Standard Proctor (ASTM D698-12e2)	1 per 4000 m ³	1.8 per 4000 m ³
Gravimetric water content (ASTM D2216-19)	1 per 2000 m ³	1.3 per 2000 m ³
Particle Size Distribution – Hydrometer (ASTM D6913M-17, D7928-17)	1 per 3000 m ³	0.8 per 3000 m ³

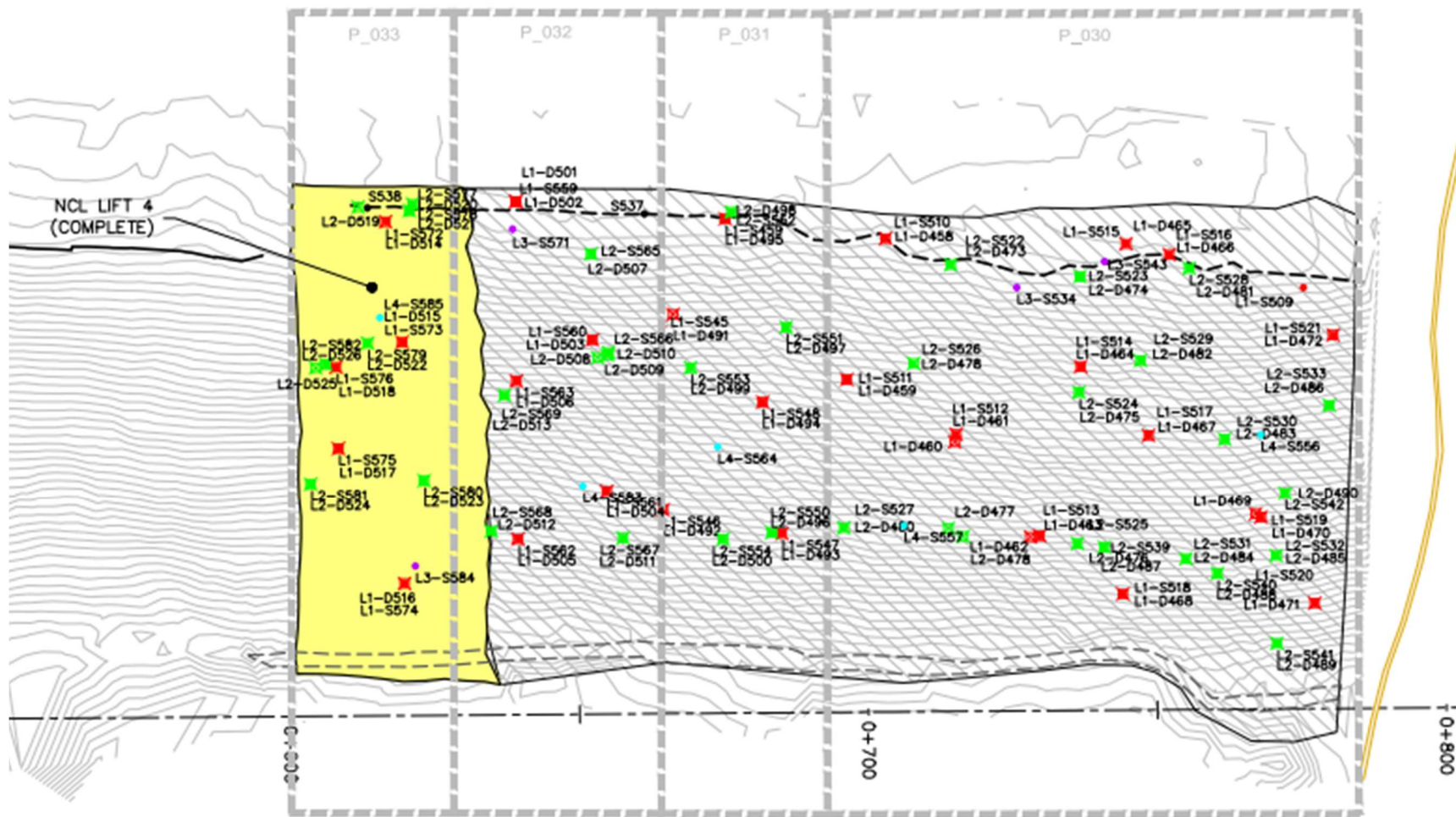


Figure 3.3: Material testing locations on the east slope of the EMRS (Tulloch, 2022a).

3.3.11 Comparison Samples

Comparison samples S534 and S580 were taken during the 2022 construction season for comparison testing by a third-party laboratory (P. Machibroda Engineering in Saskatoon). S534 was taken on May 29th during the course of construction as a check on the laboratory testing being completed by Tulloch. The resulting third-party results aided in understanding any variances that could potentially affect the overall performance or approvals of the CCL.

Proctor results from S534 yielded a slight variance from Tulloch's laboratory results, with a difference of 3% in optimum water content (17.6% - P. Machibroda, 20.6% - Tulloch) and 51 kg/m³ (1738 kg/m³ - P. Machibroda, 1687 kg/m³ - Tulloch). This variance was deemed within the acceptable expected range with the variance likely resulting from how the samples are graphed and any variances in equipment. The remaining results from S534 yielded comparable results with a minimum level of variance.

Due to the amount of cover system constructed during 2022, S580 was not sent for 3rd party analysis as 2 comparison samples were deemed unnecessary for the volume of material placed. S580 was sent to Saskatoon and stored at the Okane office should the need for 3rd party analysis arise.

3.3.12 CCL and NCL In-situ Testing Frequencies (Record Testing)

The purpose of record testing is to verify the CCL material is compacted within the specified range of OWC, yielding a high MDD result and ultimately an acceptably low as-constructed saturated hydraulic conductivity. Record testing of the CCL included *in situ* water content and density testing completed by Tulloch personnel and in-situ hydraulic conductivity testing completed by Okane. Laboratory analysis for water content was performed by Tulloch. Tests completed were performed in accordance with the principles and methods prescribed by the American Society for Testing and Materials (ASTM).

A comparison of water content measurements from the nuclear gauge with the laboratory measurements of water content taken during the construction of P30, L1 resulted in a variance of 8.3% for S549. As a result of the high sample variance and the presence of small amounts of frost in the initially placed material the decision was made to maintain the minimum frequency of laboratory water content tests associated with the nuclear densometer at 1 per 1 nuclear gauge test. Throughout 2022 cover construction, occasionally there were large variances between lab and field moisture content results, resulting in some difficulty selecting an appropriate compaction curve in the field, as well as the validation of appropriate compaction. This resulted in the frequency of water content testing at a 1:1 ratio with nuclear densometer testing being deemed necessary throughout the 2022 season to obtain corrected moisture results for nuclear densometer testing.

On average, the nuclear densometer indicated water contents slightly dry (lower) of the laboratory results, with a standard deviation of 4.1 percent. For final consideration of panel approval, the in-situ dry density and water content measurements were corrected using the laboratory-measured water contents. General observations and constructability of the material used in the CCL allowed for material to be accepted when moisture contents were outside of tolerance on the wet side of optimum. Material placed wet of optimum will aid in the long-term performance of the CCL. The frequency of record testing relative to the requirements outlined in the Technical Specifications is provided in Table 3.8.

Table 3.8: In situ field testing completed in 2022.

Field Test	Prescribed Testing Frequency	Total No. of Tests Completed	No. of Tests Considered for Record Testing Frequency	Actual Testing Frequency
Water Content (ASTM D2216-19)	1 per 1 nuclear gauge tests	86	57	0.9 per 1 nuclear gauge tests
Nuclear Gauge Density and Water Content (ASTM D6938-07b)	13 per ha per lift	69	63	19.8 per ha per lift
<i>In Situ</i> Hydraulic Conductivity (ASTM D6391-11)	1 per 3 ha	4	0	0 per 3 ha

(Okane 2021b)

The frequency of in-situ hydraulic conductivity is represented as 0 per 3 ha due to the completed borehole permeameter tests being interrupted by rainfall during their respective testing periods. These interruptions resulted in increased water levels within the reservoirs which caused the tests to be deemed inconclusive. As a result, further borehole permeameter testing within P30 will be required during the following construction season to ensure the constructed CCL meets the hydraulic conductivity requirements.

Due to less than 3 ha of cover system being constructed during the 2022 season and a 2021 testing frequency of 5.1 per 3 ha, hydraulic conductivity testing is still well above the minimum requirements included in the technical specifications. The review of current borehole testing procedures within the extents of the ASTM is necessary by Okane to mitigate the impact of weather on future hydraulic conductivity testing. Planning testing periods according to forecasts as well as excavations focused on achieving positive drainage will be focuses for future seasons.

Okane will continue to complete targeted borehole permeameter testing to add to the ongoing database which relates water content and dry density to hydraulic conductivity. This database will aid in the creation of a broader acceptable zone for construction that may allow for approval of CCL panels over a wider range of water contents and densities. The

locations of all hydraulic conductivity testing as well as the reasoning for their implementation are represented in Table 3.9.

Table 3.9: Summary of hydraulic conductivity testing.

Test ID	K _{fs}	Comment
EMRS22_BP_P30_L2_B27_220714	N/A	Installed in P30, L2 near D478 due to surface desiccation reaching the point of concern prior to coverage by subsequent L3.
EMRS22_BP_P30_L2_B28_220714	N/A	Installed in P30, L2 near D488 where rework was completed following L2 being exposed for approximately 4 weeks.
EMRS22_BP_P30_L2_B29_220721	N/A	Secondary testing location representative of EMRS22_BP_P30_L2_B27_220714
EMRS22_BP_P30_L2_B30_220722	N/A	Secondary testing location representative of EMRS22_BP_P30_L2_B30_220722

* No K_{fs} values represented for borehole permeameters 27, 28, 29, and 30 due to results being deemed inconclusive.

3.3.13 Toe drain and Instrumentation Exclusion Areas

A number of areas along the base of the EMRS have been identified as seepage areas to be left open during progressive reclamation. During the 2022 construction season no seepage areas fell within extent of the construction area. As a result, no seepage areas were left uncovered and key trenching was completed per the technical specifications.

In addition to seepage areas, exclusion areas are also required around geotechnical instrumentation routing out of the toe of the EMRS. Several of these locations contain piles of waste rock at the toe which further protect the instrumentation. During the 2022 construction season, one area of instrumentation was encountered on the slope of the EMRS at the northern edge of Panel 30. As a result, the Panel 30 key-in trench was terminated prior to reaching the waste rock pile covering the instrumentation to prevent the disruption or potential damage of the instrumentation. Due to construction progressing south opposed to north, the instrumentation remained uncovered. In future panel construction directly north of Panel 30, CCL lifts will need to be placed and compacted overtop of the instrumentation by an excavator in a continuation of proven construction practices from seasons prior.

3.3.14 Vegetative Cover and Surface Water Management System

Due to only 1.6 ha of cover system being constructed during the 2022 season and further hydraulic conductivity testing still required within Panel 30, no additional areas of completed cover system were transferred to the New Gold Environmental department. As a result, no hydro seeding was completed beyond the extents of what was completed in 2021.

4 NON-CONFORMANCES AND REMEDIATION ACTIVITIES

The Technical Specifications were developed such that adherence to these minimum requirements would produce a dataset of appropriate frequency that could clearly demonstrate the closure cover system was constructed to meet objectives. Discussed herein is the process used to assess compliance of the CCL and NCL panel layer with the overarching closure cover system objectives when uncertainty of material type classification indicated the cover system did not meet the Technical Specifications. CQA evaluates the CCL and NCL based on broader assessment of data, material description, and *in situ* hydraulic conductivity testing to determine final approval of panels. The CQA placed more emphasis on the test results of the CCL and the resulting *in situ* hydraulic conductivity as this is a critical design criterion that will affect the overall cover system performance.

4.1 Compaction and Water Content

The Technical Specifications prescribe a minimum percent compaction and water content range of 95% of the SPMDD and within -2 / +4 percentage points of the OWC, respectively for the CCL. These parameters are highlighted in Table 4.1, with field and lab non-conformities shown in Tables 4.2 and 4.3.

Table 4.1: Parameters for non-conforming in-situ testing.

Parameter	Maximum allowed % of failed tests	Allowable range for outliers
Water content	3% (not concentrated in one area).	2% dry of allowable range or 3% wet of allowable range
Dry Density	3% (not concentrated in one area)	80 kg/m ³ below required value

Okane, 2021b

Table 4.2: Percentage of non-conforming in-situ testing (field).

Parameter	% of Tests Failed (2022 Season)
Water content	63%
	(43% failed tests outside of allowable range for outliers)
Dry Density	(48% failed tests wet/ 53% dry)
	13%
	(100% failed tests outside of allowable range for outliers)

Table 4.3: Percentage of non-conforming in-situ testing (MC – corrected).

Parameter	% of Tests Failed (2022 Season)
Water content	78%
	(37% failed tests outside of allowable range for outliers)
	(41% failed tests wet/ 59% dry)
Dry Density	24%
	(100% failed tests outside of allowable range for outliers)

Although the maximum allowed percentage of failed tests relative to the specification was exceeded throughout construction in 2022, suitable compaction and moisture contents were achieved during the construction of the CCL in completed panels. It is important to note that the use of a natural borrow source will result in frequent small variations in material properties, and the proctor selected for reference and for use in evaluation against specifications may not be completely representative of the material. To account for this variability, Okane holistically evaluated the suitability of the CCL during construction based on moisture contents, material properties, and field performance.

The above water contents were evaluated on a case-by-case basis and subject to review and approval by the CQA. Typically, when the material was wet of optimum and outside of the specification, Okane was confident in the suitability of the material and its subsequent performance within the cover system to approve the panel. The main criteria that were reviewed included:

- Constructability; and
- If any concerns with slope stability were raised.

With moisture contents dry of optimum and outside of the specifications, visual *in-situ* soil inspections were completed by CQA to review malleability and determine if the material in question was suitable to produce a cohesive, singular lift. Following CQA inspection, the implementation of borehole permeameter testing was utilized to understand the potential impact on *in-situ* hydraulic conductivity. Following completed borehole permeameter testing in 2022 being deemed inconclusive as a result of interruption due to rainfall, further testing in upcoming seasons is still required within P30 to ensure adequate hydraulic conductivity has been achieved.

Where nuclear densometer testing indicated that a particular section had not met one or more construction specifications, further review of the in-situ testing and material

characteristics as well as targeted borehole permeameters were completed to ensure the overall performance and objectives of the CCL were still being met. Borehole permeameter tests were completed in an attempt to gain an understanding of the field saturated hydraulic conductivity and its relationship with the water content, dry density, and clay content over the range of OVB materials encountered.

During the 2022 construction season, stockpile sampling of several borrow areas was completed prior to and during construction which enabled the successful and continued use of one proctor for a single panel in most instances. The practice of obtaining proctor results from the material stockpiled at various borrow sources ahead of construction reduced the difficulty of selecting representative proctor values in the field. However, in the event an appropriate compaction curve needed to be selected in the field Okane considered:

- Descriptions of material and the compaction process;
- Visual analysis of material and CCL sections;
- Consideration of nuclear densometer test results in the context of the compaction curve database; and
- Material texture and plasticity data.

Okane continues to create yearly compaction curve sheets which incorporate data from samples collected during construction of the EMRS CCL (Figure 4.1). These compaction curves were used during assessment of field density measurements to evaluate percent compaction. As laboratory proctor tests take approximately 4 to 5 days to complete, the use of these compaction curves allow construction to continue until a laboratory proctor can be completed. Results of laboratory compaction testing were then applied to the field densities to determine the actual compaction achieved *in situ*.

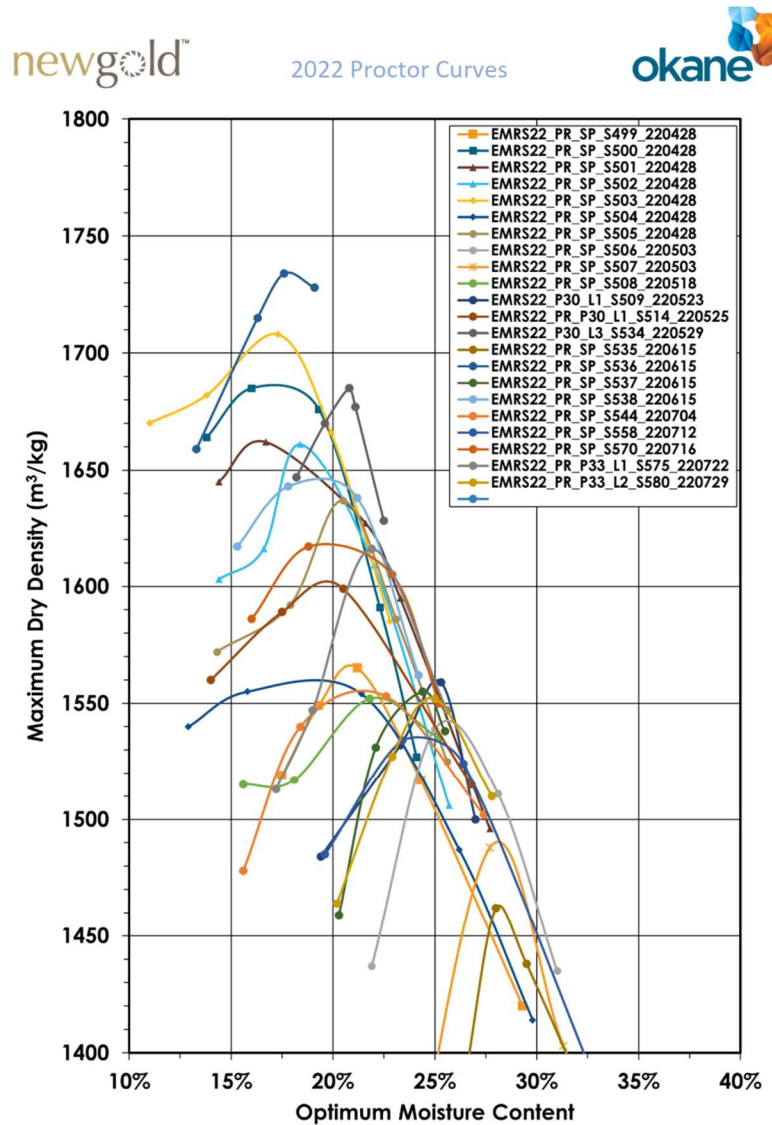


Figure 4.1: 2022 compaction curves.

4.2 CCL and NCL Lift Thickness

Building off the learnings and recommendations of the 2021 construction season the targeted constructed lift thickness of each of the CCL lifts for the 2022 construction season was increased to 0.30 m from 0.25 m. This resulted in the CCL being constructed within tolerance at 0.6 m and the NCL being constructed to maintain a nominal cover system thickness of 1.5 m. By utilizing more material in CCL construction, the frequency of low areas represented in the heat maps continued to be minimal and no investigations were required during the 2022 construction season.

This combined with the ability for Tulloch to survey the entirety of the waste rock surface within the panel boundaries prior to any material being stockpiled on the bench/crown of the panel resulted in only 0.69% of CCL and 4.29% of NCL lift points being under tolerance and considered non-compliant according to the final as-built report. It is noted that the majority of red areas (< 1.4m) represented within the final NCL heat map appear to occur past the key trench and outside the extents of the cover system. This is a result of the NCL needing to be extended past the key trench and into a topsoil berm to allow for adequate runoff. These areas are not considered a point of concern as they have no effect on the ability of the cover system to perform as designed.

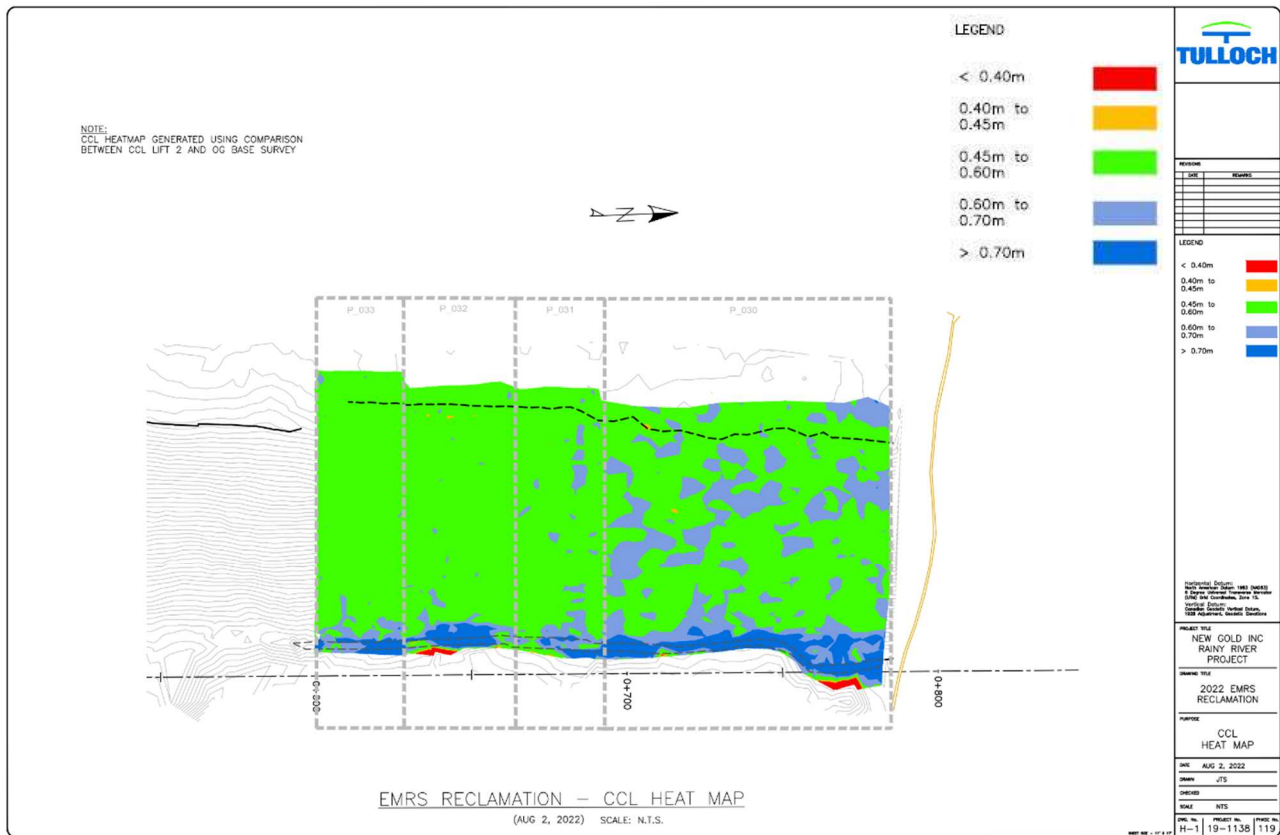


Figure 4.2: EMRS 2022 CCL thickness heat map (from Tulloch, 2022b).

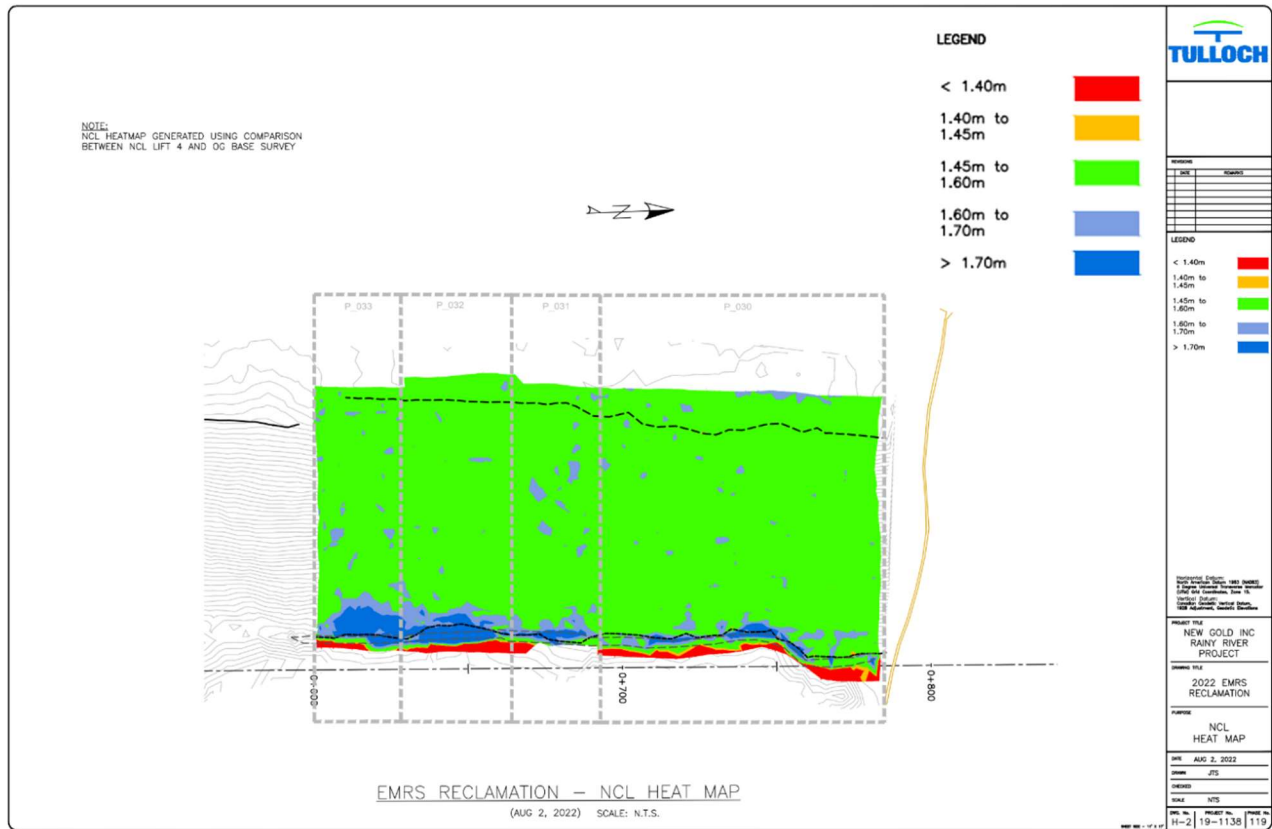


Figure 4.3: EMRS 2022 NCL thickness heat map (from Tulloch, 2022c)

5 LEARNINGS AND RECOMMENDATIONS

In 2022, Okane maintained a focus on continuing proven construction practices from past seasons and identifying areas for improvement that could be carried forward into future construction. As a whole, the 2022 season was a successful continuation of progressive reclamation on the EMRS. New construction methodologies were implemented due to large rainfall events and different placement conditions dependent on the location within the EMRS. Okane is looking forward to continuing to build from this season and believes that utilizing the following key learnings and recommendations will aid in that goal.

5.1 Construction Methodology

During cover system construction in 2022, changes in construction methodology were made to help ensure the cover system design was met and / or improve the efficiency of construction

5.1.1 CCL Compaction

Following the request to lower the number of passes required by the roller from four to two during the 2021 season, New Gold returned to the initial methodology of completing 4 passes with the sheepsfoot roller for all CCL lifts completed. A lessened need for the implementation of compaction trials to confirm adequate compaction resulted after returning to 4 passes of the sheepsfoot roller. Although there was no longer a need to prove that 2 passes of the roller had achieved proper compaction, compaction trials remained a useful practice to be utilized at the discretion of CQA in the event:

- A representative proctor was not used;
- Testing results did not meet specifications;
- A visible change in material was noted.

Due to pre-emptive stockpile sampling of multiple borrow areas and thorough sorting of CCL material during the handling process the above conditions were not met during the 2022 season. As a result, compaction trials were not deemed necessary by CQA as panels 30 to 33 were constructed with relatively homogeneous material with representative proctor values for nuclear density testing.

5.1.2 Effective Cover Drainage

Due to the presence of a topsoil berm located on the east side of the EMRS at the toe between stationing 0+793 to 0+562, difficulty occurred achieving effective drainage off the cover

system. This difficulty was a result of the topsoil berm elevation being greater than that of the final NCL lift in areas. As panel construction progressed down chainage, the height of the topsoil berm increased which resulted in NCL lifts being constantly assessed for areas of pooled water.

It was determined that in order to achieve adequate runoff past the toe of the EMRS cover system, the best course of action was to alter the construction methodology of L4 placement and extend the NCL further past the key trench. While extending L4, the topsoil berm was simultaneously regraded to allow runoff to pool within the topsoil material opposed to within the extents of the cover system. Following the completion of P33, CQC marked out the location of the key trench through panels 30 to 33 to provide a visual representation that pooled water was indeed outside the extents of the cover system.

While extending the NCL during L4 placement achieved adequate runoff upon panel completion, the issue of pooling water within the extent of panels occurred after rainfall during the construction of lifts 1 to 3. Okane recommends the pre-emptive regrading of the topsoil berm remaining during upcoming construction seasons. This would result in improved runoff during panel construction and limit the amount of downtime required to dry placed material following rainfall.

5.1.3 Panel Widths

During the construction of panel 30 rainfall caused the CCL material to be oversaturated and contain areas of standing water. While the material was given time to dry, New Gold made the decision to extend the width of P30 to 90 m to continue CCL placement and limit down time. As a result, P30 CCL was tested in two halves to enable construction of subsequent lifts on the approved southern half while compaction and testing was still in progress on the northern half of the panel.

During NCL placement overtop of the approved CCL lifts, areas of P30, L2 achieved a concerning level of desiccation. As there was no availability to wet the material prior to coverage it was determined the best available course of action was to cover L2 with a reduced NCL lift of moist pliable material. Subsequent delays and priority work within the TMA led to P30 CCL being exposed long enough that rework of the lift needed prior to resuming NCL placement.

Following the completion of P30, the panel widths were decreased to a target width of 30m. Upon the return to smaller panel widths the desiccation of CCL material was no longer an issue for the remainder of cover system construction in 2022.

5.2 Waste Rock Surface

A frequent challenge throughout construction in 2021 was the uncertainty surrounding the waste rock surface at the crest, directly below the stockpiled material. In response to this issue, material was no longer stockpiled on the slope of the EMRS where panel construction was to occur during the 2022 season. CCL material was instead hauled to the current placement area for use in cover construction. This new methodology resulted in Tulloch being able to survey the entirety of the panel area and the generation of a more accurate waste rock surface for subsequent lifts to be built off at the desired offset.

As a result of the more accurate waste rock surface no further exploration in the form of spot checks were required during 2022 construction. This streamlined the construction process greatly as there was no need to remove already placed material to obtain accurate survey data in the area of the bench/crown to generate a revised waste rock surface.

5.3 Stockpile Material Quality

It was noted that different borrow locations within in the EMRS contained stone content of varied quantities. While the north and central stockpiles were deemed acceptable for CCL use following stockpile sampling and field inspections, the southern stockpile was found to contain a large quantity of stone at varying gradations that made the majority of the borrow area only suitable for NCL use.

An improved method of the material handling process would be beneficial for the overall efficiency of subsequent construction seasons to maximize the amount of material which can be utilized for CCL placement. If changes in the quality of borrow material at the source is noted, a communication plan should be developed and implemented for assisting in material placement locations to avoid issues that cause delays in reclamation activities.

5.4 Documentation and Data Transfer

During the 2022 construction season, Infrakit was continued to be used as an information management system for cover system construction. Lab results, daily QC/QA reports, placement maps, as-built surfaces, field testing results, sample points, EMRS stationing, and panel boundaries were all compiled within Infrakits database of cover system construction for the 2022 season. Due to stoppages during the construction season, documentation intervals varied but adhering to the common naming convention allowed for easy categorization of results following breaks in EMRS construction.

The introduction of InEight construction software by New Gold for the 2022 season resulted in Tulloch laboratory results being entered into the software and relayed to Okane via document transmittal emails. This allowed CQA to download testing results for entry into the quality assurance data summaries but removed the ability to access the inventory of test results that were previously available through a shared folder. While the current utilization of InEight is adequate, Okane believes having access to the InEight database would be beneficial for following construction seasons.

To aid in the efficiency of future survey data transfers, Okane recommends having a monthly submission of all relevant data from Tulloch. Survey data includes all lift as-builts, lift points, density and sample location points, and panel boundaries. The monthly submission of data is beneficial for CQA to separate construction monthly and is added to Infracit to create a base map for referencing locations with respect to the daily reports. Obtaining this data at month end will enable Okane to complete a review of the information and generate as-built reports within Infracit for the month.

5.5 Implemented Learnings and Recommendations

Several learnings and recommendations from the 2021 record of construction were implemented during the 2022 construction season and led to improvements in the construction process. Okane considers the continuation and expansion of these learnings vital for future cover system construction.

5.5.1 CCL Construction

At the start of the 2022 construction season, construction continued based off the previous years' learnings with a targeted nominal CCL thickness of 0.6m. This resulted in the CCL being constructed within tolerance at 0.6 m and the NCL being constructed to maintain a nominal cover system thickness of 1.5 m. This continued methodology combined with Tulloch's ability to survey the entirety of the panel prior to the placement of material resulted in no low spot investigations being required during the 2022 construction season.

5.5.2 Compaction Curve Selection

The most challenging aspect of cover system construction continues to be the uncertainty of the CCL material characteristics until placement due to the variability of material from multiple borrow areas within the EMRS via the open pit. This was a known challenge prior to the onset of construction and has continued throughout the duration of construction activities. Pre-emptive stockpile sampling has helped to mitigate this issue, but material variability still presents issues with selecting appropriate and representative proctor curves at times.

The most important design criterion for the CCL is the as-built hydraulic conductivity. Aside from considerations related to geotechnical stability, the specifications included in the Construction Handbook (Okane, 2021b) are provided to ensure the hydraulic conductivity target is achieved. Okane has continued utilizing laboratory test results, primarily the hydrometer, to indicate material suitability with respect to hydraulic conductivity. Targeted borehole permeameter testing continues in order to add to a database relating water content and dry density to hydraulic conductivity. This database will aid in the creation of a broader 'acceptable zone' for construction that may allow for approval of CCL panels over a wider range of water contents and densities.

5.5.3 Laboratory and Field Testing

Although there were improvements in the frequency of testing that was completed during the 2021 construction season, the general recommendation for CQC is that the testing frequencies stipulated in the Construction Handbook are described as the minimums allowable. This means that if there is any uncertainty in the quality of the cover material or if tests are bordering failure, more testing should be completed. Additional samples and tests may also be requested at CQA's discretion. These additional tests can provide the project group with a better understanding of the quality and consistency of the cover system that will inform on long term cover system performance.

Proactive testing of stockpiles is recommended to continue as a routine activity for upcoming construction seasons. The tests completed can vary based on visual inspection, but the data collected from these tests combined with visual inspections will aid in identifying subsequent proctor values to be used for compaction testing.

With respect to in-situ hydraulic conductivity testing, the following improvements will continue to be implemented on all subsequent tests.

- Tests will remain in place for a minimum of four days. This test period is typical of material with low K_{fs} ; the clay OVB used in the CCL requires at least several days to reach steady state conditions. Results will be analyzed prior to terminating the tests to ensure steady state has been achieved (<5% difference in K_{fs} measurements between readings);
- To reduce condensation within the water reservoir, solar shields will continue to be employed; and
- Where possible, readings will be collected at approximately the same time each morning to account for changes in condensation through the day and to allow a suitable long period between readings to reduce noise in the data set.

5.5.4 Survey Control

Building off recommendations from the 2021 season, the following items were continued or introduced to aid in survey control to limit the potential of rework:

- Preparation and survey of the waste rock surface to the level of detail required for thickness comparisons on a highly variable surface;
- Survey of waste rock surface at the bench and crown prior to the stockpiling of material within panel limits;
- Development of subsequent design surfaces for each material lift to act as a reference guide;
- Use of GPS guided equipment; and
- Frequent generation of heat / thickness maps to identify suspect areas for review.

5.5.5 Documentation

The following types of documentation were identified throughout the season as having a great importance to CQA and to the success of the reclamation activities.

5.5.5.1 Daily Reports

Daily reports completed by CQC documented all testing and observations during construction. The reports were completed by CQC and submitted daily to CQA for review. During the construction season, the consistency of reporting improved to be more in line with that of the 2021 season. Highlighted below are the key pieces of information and observations identified for continued inclusion in the reports.

1. Every section should be filled out on daily reports. Key information regarding the material used for the CCL should be included. This information and details of the CCL material should include:
 - Initial consistency (moisture, structure, texture, etc.);
 - Placement observations (e.g., is the material stiff and compacts well, does equipment leave ruts and ridges);
 - Final surface conditions prior to placement of the non-compacted layer (NCL); and

- The inclusion of material samples taken according to the naming convention.
2. Consistency in material description of CCL material is important to allow for any change in material to be well documented. Detailed notes should be included to indicate if the material has remained consistent or changes observed along with material descriptions.
 3. The panel approval section indicates if a section of the CCL meets the criteria outlined in the Technical Specifications and is deemed acceptable. Part of the CQC work involves ensuring the appropriate proctor compaction curve is applied for the CCL material to determine that the density has met the Technical Specifications. CQC is responsible for selecting an appropriate proctor for the CCL material using the supplied guides, technical experience, and support from CQA, as needed. The proctor applied to determine field compaction should be documented within the Daily Report with comments as to why the material proctor was selected.
 4. CQC should provide context in the Daily Reports around any issues observed between the in-situ density readings and the laboratory proctor results in the event CQA is not on-site. This information could include, but is not limited to, issues with the waste rock surface (large void spaces), changes in material structure (soft to very soft), water contents, and material variability within a lift.
 5. Consistency according to the document naming convention both within the report name and its contents. Having the naming convention followed within the reports allows for the consistent referencing through all site documentation which matches quality assurance databases.

5.5.5.2 Density Reports

Density reports were completed by CQC and provided to CQA to capture all relevant information and data associated with nuclear densometer testing (standard counts, material wet and dry density, water content, location, etc.). The quality of Density reports improved following the request for additional information for testing locations to further differentiate which testing locations should be used for approval or if extenuating circumstances resulted in additional testing being completed in the area. In general, all relevant information was included in these reports.

A key aspect to highlight is that laboratory results (water contents and proctor curves) should be used to correct the field density test results. Upon receipt of laboratory results, density checks should be completed by CQC in the Density Reports to ensure the verified CCL panels achieve specifications and resubmitted to CQA as a revision.

5.5.5.3 EMRS Tracking Summary

A tracking summary was completed and sent out daily by Tulloch to maintain a summary of all samples taken. These samples were named under the agreed upon naming convention and the corresponding stationing and offset were listed. This summary gave CQA a great tool for reference against Okane's testing database to ensure all testing and corresponding results were accounted for.

5.5.5.4 Survey Data

Survey data includes all lift as-builts, lift points, density and sample location points, and panel boundaries. This data is crucial for CQA services and will be added to Infrakit to create a base map for referencing locations with respect to the daily reports. This data will also aid in the review of thicknesses during construction activities via the generation of as-built reports within Infrakit.

5.5.5.5 Communication

Okane recommends the continuation of a kick-off meeting prior to the construction season to confirm the roles and responsibilities for all parties involved. This will ensure that there are clear lines of communication between the groups, create a mutual understanding of work to be completed, and will help issues to be resolved efficiently.

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Appendix A

EMRS Operational Handbook

EMRS Cover Construction Operational Handbook

July 29, 2021



newgold okane



Integrated Mine Waste Management
and Closure Services
Specialists in Geochemistry and
Unsaturated Zone Hydrology

EMRS Cover Construction Operational Handbook

1003/019-009

July 29, 2021

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Rev. #	Rev. Date	Author	Reviewer	PM Sign-off
A	August 14, 2020	M.McKeown	H.Cooper	J.Lutz
B	August 19, 2020	M.McKeown	H.Cooper	J.Lutz
0	September 17, 2020	M. McKeown	H. Cooper	J. Lutz
1	July 29, 2021	H. Cooper	M. McKeown	J. Lutz

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TABLE OF REVISIONS

Revision	Date Submitted	Reason
Rev A – DRAFT	August 14, 2020	Original submission
Rev B – DRAFT	August 19, 2020	Revisions made based on review comments and clarifications requested by New Gold.
Rev 0	September 17, 2020	Revisions based on feedback from Tulloch for clarification. Revisions to sections 5.2.1, 5.2.3, and 6.0.
Rev 1	July 7, 2021	Update water content specifications, additional density protocols, hydraulic conductivity protocols, specification for out of tolerance CCL thickness.

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Project Objectives and Scope.....	1
1.2	Cover Design Overview.....	1
2	SCOPE	3
3	STANDARDS	4
4	DEFINITIONS / ABBREVIATIONS	5
5	GUIDELINES AND SPECIFICATIONS	7
5.1	Surface Preparation	7
5.2	Compacted Clay Layer	7
5.2.1	Material.....	7
5.2.2	Material Identification and Handling.....	8
5.2.3	Placement and Compaction	9
5.3	Non-Compacted Layer (NCL)	14
6	CQC PROCEDURES	15
6.1	Allowable Variations and Corrective Actions.....	16
7	DOCUMENTATION	18
8	REFERENCES	19

Attachment A Material Selection Guide

1 INTRODUCTION

1.1 Project Objectives and Scope

This purpose of this operational handbook is to serve as a practical reference guide for the construction of the cover system on the lower benches of the East Mine Rock Stockpile (EMRS) slopes. It is specifically designed for the NE wick drain 2/3/4 and SE shear key bench slope areas identified for progressive reclamation.

1.2 Cover Design Overview

The EMRS has been designed to store and encapsulate potentially acid generating (PAG) mine rock. An enhanced cover system consisting of a barrier layer overlain by a growth medium is designed to limit net percolation (NP) and control oxygen (O₂) ingress to the PAG rock. The enhanced cover system uses both moisture store-and-release and enhanced runoff principles to achieve reduced NP. The barrier layer within the cover system controls O₂ ingress by effectively eliminating advective gas transport. However, a degree of saturation of approximately 85% within the layer must be maintained for the advective gas transport barrier to be effective. The enhanced cover system will be placed over the side slopes, benches and the upper plateau areas of the stockpile, progressively during operations, and at closure. Progressive rehabilitation of the stockpile will begin in autumn 2020; the cover system will be constructed on about 14ha of the lower bench slopes in the NE and SE, following rock placement and surface preparation.

The two layer cover system will consist of:

- A 0.5 m compacted overburden layer placed directly on the landform prepared to the required grade;
- A 1 m non-compacted overburden layer placed directly on the underlying compacted layer;
- A vegetation cover that meets landform land use expectations; and
- A surface water management system that allows for the landform to meet physical stability expectations.

The 1 m layer of non-compacted overburden material is the main store-and-release component of the cover system (growth medium), while the 0.5 m layer of compacted overburden material limits net percolation and oxygen ingress into the underlying mine rock (barrier layer). The cover system provides source control in two ways: the limitation of oxygen

into the mine rock, thereby decreasing the oxidation of sulphide materials within; and reduction of water infiltrating through the stockpile and reporting to the groundwater table.

2 SCOPE

This Technical Specification applies to Work constructed by contractors, sub-contractors or hired labour that have entered into a contractual agreement with the Owner.

This Technical Specification shall be used in conjunction with the stated requirements of any Local and Federal Governments or other authority in whose area the Work is to be constructed. This also includes Environmental, Health and Safety legislation.

This Technical Specification allows access for inspection, surveying, sampling, or testing through out the course of the Work by the Owner, CQC, or CQA.

This Technical Specification was developed to direct quality assurance and quality control activities during construction of the cover system during the planned autumn 2020 progressive reclamation activities on the lower bench slopes of the EMRS in the NE Wick Drain 2/3/4 and SE Shear Key areas, and is only intended for this use. This Technical Specification was developed using available information for the open-pit materials expected for use in the cover construction of this area. It is anticipated that this Technical Specification will be reviewed and adapted as necessary to reflect changing material borrow types or varying conditions on subsequent sections of progressive reclamation on the EMRS.

3 STANDARDS

The following information outlines all relevant standards and/or published guides to be followed where specified. Variations to these standards and/or guides shall be approved prior to implementation by the Construction Quality Assurance personnel.

Table 3.1: Laboratory Testing Standards

Laboratory Test	ASTM Standard
Water Content	D2216-19
Atterberg Limits	D4318-00
Particle Size Distribution (Soils)	D6913M-17
Hydrometer	D7928-17
Standard Proctor	D698-12e2
Hydraulic Conductivity	D5856-15 or D5084-16a

Table 3.2: Field Testing Standards

Field Test	ASTM Standard
Compaction by Nuclear Densometer	D6938-07b
Hydraulic Conductivity	D6391-11

4 DEFINITIONS / ABBREVIATIONS

The following table summarizes and describes all abbreviations and terms used throughout this document.

Table 4.1: Definitions/Abbreviations

Term	Abbreviation	Definition
Owner	-	Defined as New Gold or its authorized representative.
Engineer		Refers to the designated engineer responsible for technical oversight of the cover system, or their appointees.
Site	-	Defined as the land and other places on, under, in or through which the Work is to be carried out.
Work	-	Defined as the entire completed construction or the various separately identifiable parts thereof, as defined in the Technical Specifications, or as required by the Owner or CQA.
Construction Quality Control	CQC	Defined as the personnel responsible for monitoring and controlling the quality of the Work. Personnel are required to ensure measures are taken to comply with requirements for materials and procedures as stated in the specification for the Work.
Construction Quality Assurance	CQA	Defined as the personnel responsible for assuring the Work was constructed as specified. Personnel are required to ensure the Work is in compliance with the specifications developed for the Work.
Capital Projects	-	Defined as the party who will execute the Work for the Owner.
Technical Specifications	-	Defined as this document in its entirety or other addenda prepared for the Work.
Earthworks	-	All operations necessary to excavate earth and rock from the proposed site irrespective of type and sub-surface conditions, to borrow or import embankment material for use as specified, to construct embankments including placing selected material as specified, to backfill around in situ structures, and to remove and replace unsuitable material below the subgrade.
As-built	-	A field survey, construction drawing, 3D model, or other descriptive representation of the completed earthworks.
Compacted Clay Layer	CCL	The barrier or low permeability layer at the interface of the leveling layer or waste rock surface.
Non-Compacted Layer	NCL	The covering layer for insulation and limiting freezing of the Compacted Clay Layer.
Percent standard compaction		Relative Dry Density of in situ material expressed as a percentage of the maximum dry density of the material using Standard Compaction procedures as specified by ASTM standards.

The role of the CQA is to ensure the Work is completed as per the design specifications. CQA personnel may not be on site at all times, but must have access to all data, testing results, and

documentation completed by the CQC. Additional sampling and testing can be requested by the CQA at any time during construction (before or after approval by CQC). The Owner shall give the CQA full cooperation in sample taking or conducting tests at their discretion and shall render such assistance as is necessary to enable sampling and testing to be carried out expeditiously. The Owner shall allow sufficient time for the CQA to carry out the required test work in order to determine the acceptability of the placed materials.

CQA are expected and allowed to complete inspections, audits, and review of all Work approved by the CQC. It is at the discretion of the CQA and/or the Engineer to provide final approval for the Work. CQA inspections and audits will include both completed Work approved by the CQC and current Work being completed.

5 GUIDELINES AND SPECIFICATIONS

5.1 Surface Preparation

The objective of EMRS Surface Preparation is to prepare a relatively dense and uniform foundation for the cover system, which has minimal open voids as well as no large protruding rocks. The finished bare waste rock surface of the EMRS shall be prepared to the satisfaction of the CQC prior to placing cover material for the loose lift for CCL. Once the EMRS finished surface is approved by the CQC, the Owner or CQC shall survey the surface as a record of construction to confirm the landform conforms to EMRS design specifications, and for determination of proper cover layer thicknesses in all areas. All CQC documentation will be provided to the COA/Engineer for review to ensure conformance to the above-mentioned specifications.

5.2 Compacted Clay Layer

The CCL will serve as a barrier layer to limit net percolation of surface water through the cover system and into the underlying waste rock. It also serves to limit oxygen ingress into the waste rock landform.

5.2.1 Material

RRM plans to use materials excavated from within the pit boundary as fill material for construction of the CCL. The identified clay overburden within the pit boundary area consists of both the Brenna formation and the Whitemouth Lake (WML) formation. Gradation requirements for materials incorporated in the CCL are provided in Table 5.1.

Table 5.1: CCL Gradation Specification

Particle Size (mm)	Coarser Limit (% Passing)	Finer Limit (% Passing)
250	100	100
175	100	95
25	100	95
2	100	70
0.425	100	70
0.063	100	40
0.002	90	10

In addition to the textural requirements outlined above, the material should have a minimum plasticity index of 10. Sampling and testing should be completed as per Section 6 to

document compliance with textural and plasticity specifications. A material selection guide has been provided for assessment of plasticity in the field (Attachment A).

CCL material shall be free of deleterious material such as organics and large rocks (> 250 mm). Any CCL material delivered to the construction zone that is not of suitable quality for CCL construction must be removed, and replaced with additional CCL material.

The cover system shall not contain any waste rock material. Cover system material that may have been mixed with the underlying waste rock due to scraping and movement of material shall not be used within the cover system.

5.2.2 *Material Identification and Handling*

Selecting materials most suitable for use in the CCL will require close coordination between the Pit Supervisor and Capital Projects. As materials for the CCL will be sourced from the pit boundary, material control will begin with excavation. The volume of material required for construction of the CCL represents just over one third of the total material volume requirement for cover system construction. Material control requirements for the CCL are more stringent than those for the NCL. As such, the majority of the materials reserved for cover system construction can be excluded from the CCL as necessary and utilized in the NCL.

The ideal time to exclude materials from the CCL is prior to placement. The most efficient means of reducing water content will likely involve end-dumping materials selected for use in the CCL in situ (discussed below), which requires that material selection take place prior to placement. To the extent possible, materials should be 'preapproved' by the truck load to minimize the requirement for handling after placement. Truck loads should be prioritized for CCL construction based on the following criteria:

- Material properties meet specifications as outlined in Section 5.1
- Materials should be free of deleterious materials and organic matter such as trees or topsoil. Stripping materials prior to excavation would ensure these materials are not included in the CCL, promote drying of overburden materials prior to placement, and provide a reserve of organic materials for reclamation activities.
- Materials should be free of oversize (> 250 mm) materials (to the extent possible prior to placement).
- Materials should be relatively homogeneous. Even if the contents of a truck load meet the above criteria, dumping mixed materials of varying textures and compaction characteristics will complicate the construction process (discussed in Section 5.2.3).

Materials which are deemed unsuitable for use in the CCL can be used in the NCL. Materials to be used in construction of the NCL should be stockpiled in locations convenient for timely application of the NCL following CCL construction (Section 5.3).

Material tests to document conformity of the materials to the above specifications are provided in Section 6. A field guide to evaluate plasticity is provided in Attachment A. Attachment A can be used to guide decision making in the field with regard to a material's plasticity before laboratory test results are available.

5.2.3 Placement and Compaction

The current specification is to compact the CCL in two lifts of nominally 0.25 m. Based on compaction efforts to date, the first lift should be placed in loose lift approximately 0.4 m in thickness and should not exceed 0.5 m. After compaction, the first lift shall have a minimum thickness of 0.25 m (measured perpendicular to the ground surface) -0.1 m / +0.2 m tolerance. The second lift may be placed at a reduced lift thickness depending on the surveyed thickness of the first lift. The CCL shall have a minimum total thickness of 0.50 m across the EMRS with a -0.1 m / +0.2 m tolerance.

The minimum dry density and moisture content range for compaction of the CCL is 95% of the standard proctor maximum dry density and within -2 / +4 percentage points of optimum moisture content, respectively, as determined by ASTM D698¹. With the variability of a natural borrow source there can be difficulties in selecting and maintaining an appropriate proctor value. In these instances, a re-compaction of the CCL can be completed to give an indication of the level of compaction achieved and therefore percent compaction allowing the CQA to accept the panel. The general procedure for completing a test pad is described in detail below.

Proctor compaction curves determined based on materials sampled from borrow sources (AMEC, 2017) and in situ from the CCL are presented in Figure 5.1. Proctor curves are roughly separated into Brenna and WML formation material. For example, the EMRS- L1-021 and EMRS- L1-026 materials fall within the assumed Brenna formation with a Standard Proctor maximum dry densities of 1,621 and 1,729 m³/kg with corresponding optimum moisture content of about 22 and 18%, respectively. The measured in situ water content were 24 and 21% which are within the targeted range (1 to 4 percentage points wet of optimum). Where the water content is beyond the specified range, the CQA can determine if the material will be

¹ ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).

acceptable based on the visual characteristics (firm, pliable) and the general constructability of the material.

Soils that are too wet must be allowed to dry prior to compaction. To promote drying, the material may be placed in a loose lift prior to compaction. To reduce handling requirements during placement, the materials may be end dumped directly over the slope. Drying may take place over one or more days depending on the weather. When the material can support heavy equipment, a bulldozer can spread it to achieve the targeted loose lift thickness. CQC should check water content periodically to determine when it is within the acceptable range. A disk tiller or rototiller may also be used to ensure uniform drying of the material as necessary.

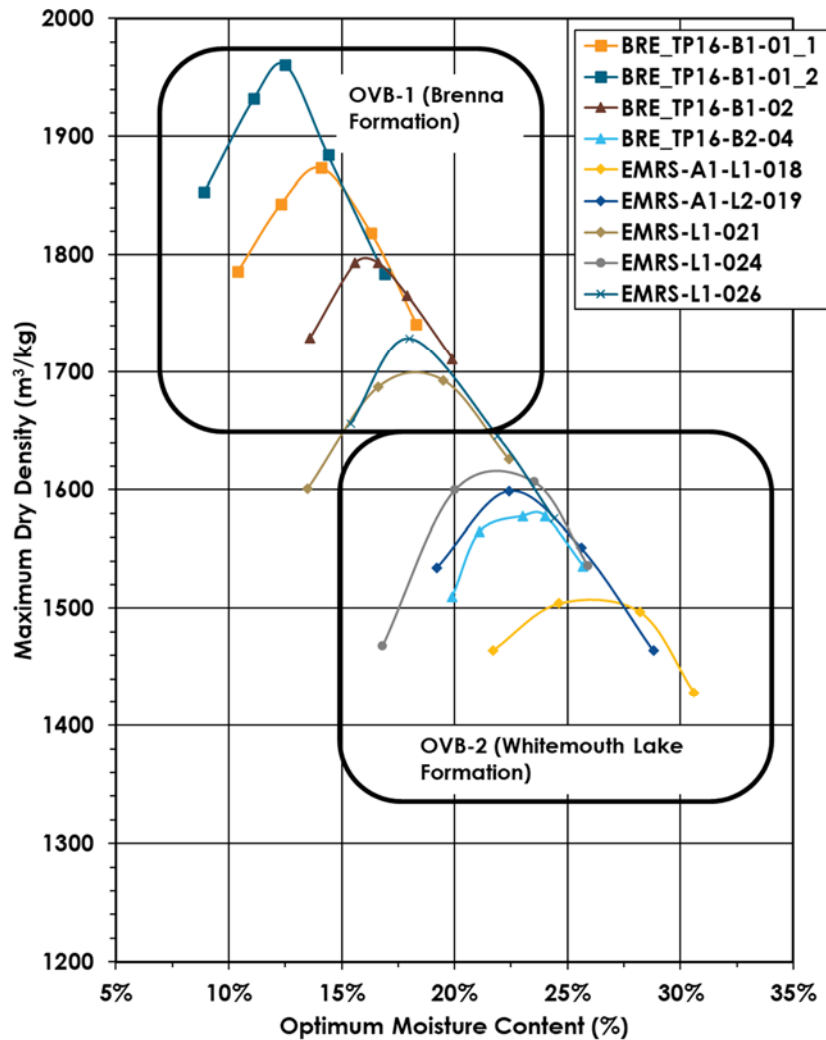


Figure 5.1: Compaction curves from field testing program

Samples EMRS-A1-L1-018, EMRS-A1-L2-019, and EMRS-L1-021 were in situ CCL material. This material comprised a higher proportion of clay sized particles, a higher plasticity index, and compaction characteristics more characteristic of WML. The difference in optimum water

contents and maximum dry density were evident. Figure 5.1 highlights the importance of material characterization during placement due to the variability in material properties. Mixing materials in various proportions could produce a wide range in optimum water contents and make it very difficult to select the appropriate curve in the field. The inability to select the appropriate compaction curve may result in an inability to demonstrate that the CCL was constructed as designed.

An understanding of which curve is applicable is required to ensure proper compaction of the CCL. It is expected that an appropriate curve will be selected primarily using a subjective assessment. Laboratory proctor compaction tests should proceed throughout construction at a minimum frequency of one test per 4,000 m³ of material placed (Section 6). Control testing frequencies (in Table 6.2) can be revised as construction of the CCL progresses and the properties of the material used to construct the CCL is better understood. If materials are shown to be relatively homogeneous, CQC personnel can estimate optimum water content for the material based on previous test results and an evaluation of the material at any given location. A material can be considered homogeneous for this purpose when a set of no less than five laboratory proctor compaction test results are available and optimum water content does not vary by more than 3 percentage points and maximum dry density does not vary by more than 100 kg/m³.

The assumed compaction curve should be documented by CQC personnel as materials are placed. If CQC personnel are uncertain as to which compaction curve should be applied, a new standard proctor test should be requested. Standard laboratory proctor compaction tests can require a minimum of four days to complete. To prevent potential downtime associated with testing, the following supplemental techniques may be employed to facilitate selection of the appropriate compaction curve.

One-point proctor compaction tests: Results of single compaction testing can be plotted with previously determined compaction curves to estimate the optimum water content and maximum dry density. It is anticipated that samples for one point compaction tests could be collected and tested while the materials are being allowed to dry, thus minimizing downtime. The reduced time associated with this procedure would allow for results to be available by the time the material is at a suitable water content for compaction. The purpose of these tests would be to assist with subjective estimates and to fill in data gaps when results of complete compaction tests are not yet available. It is likely that one-point compaction testing will be used more extensively in the early stages of construction.

Three-point Proctor Compaction Tests: This technique is more reliable than the one-point test but takes longer to complete, using a minimum of three compaction points to define a curve per ASTM D5080.

Test Pads: If a new material type is to be introduced for CCL construction, then CQC will request a test pad be constructed to confirm construction methodology and demonstrate an acceptable hydraulic conductivity.

Based on the results of preliminary compaction efforts, the methodology for compaction shall consist of at least four passes with a padfoot roller (following track compaction associated with placement of the loose lift). The roller shall be appropriately sized (10 tonne roller minimum) for the Work and be satisfactory to CQC. The maximum vibration frequency on the rollers shall be used for each pass. Adjacent roller passes shall be overlapped by a minimum of one third. Compaction of the CCL will not be allowed during adverse conditions including, but not limited to, rainfall or freezing temperatures. After compaction, the Owner shall survey its surface as a record of construction and for determining the thickness of the CCL in all areas.

When an appropriate proctor curve can not be determined the CQC shall conduct compaction testing to determine if the in-situ material is compacted to its maximum density using the following steps:

1. Select a representative location within the panel;
2. Apply additional compaction effort to the area with a known number of passes (recommend starting with 4 to 6);
3. Collect another density reading with the nuclear densometer;
4. Recompact the area with additional passes (4 to 6);
5. Collect another nuclear densometer reading;
6. Compare dry density values. If the dry density variance is no greater than 5% the area can be considered compacted and approved. If the variance in the area is found to be greater than 5% the entire panel must be re-compacted to the minimum number of passes required to fall below the 5% variance in dry density.
7. Submit all documentation to the CQA and the Engineer for final approval.

Panels of CCL may be approved in the field given the panel meets the specifications described herein. Approval of any given panel should be based on the following considerations

- Inspection of materials during placement to confirm suitability;
- Monitoring of compaction treatment;

- Review of survey data to confirm lift thickness are in compliance with specifications; and
- Review of water content and density test results to confirm an acceptable level of compaction was achieved within the specified range of water content.

Approval of a CCL panel should be documented by CQC in the daily summary report (Section 7). Summary notes and relevant data should be made available to CQA personnel and the Engineer on a daily basis. If CQA or Engineer determines that a panel does not conform to specifications the Owner may be required to rework and recompact the area.

Approved areas of the CCL shall not be left exposed for longer than **24 hours** to prevent desiccation of the CCL (applicable to both lifts of the CCL). It is expected that desiccation occurring during this period would be limited to a thin exterior crust; this specification may be adjusted based on weather conditions. Tarps may be used to cover completed areas of the CCL in the event the subsequent layer cannot be placed in a timely manner. If desiccation cracks develop in an approved, completed area of the CCL, the Owner shall rework and recompact the material as necessary.

If CCL remains uncovered for longer than 24 hours the CCL should be examined for depth of drying due to the prolonged exposure; if the depth of drying is greater than the minimum thickness of the layer than the Owner shall rework and recompact the material as necessary.

Findings from the cover system stability analysis (Okane, 2020b) indicated generally that if slip surfaces are introduced, the factor of safety (FoS) of the cover will be reduced. Sensitivity analysis indicated that if high moisture content material is used, creating a R_u (ratio of pore-water pressure to overburden stress) of 0.4 or higher, the cover will not meet the minimum required FoS. To ensure an adequate FoS of the cover system, the Owner shall adhere to water content specifications set out in this document, and ensure that in the event of rain over an approved, completed area of the CCL, the area is stripped and reworked.

5.2.4 *Compacted Clay Layer Key-in Trench*

The CCL shall be keyed-in along the toe of the slope of the EMRS to limit the potential for oxygen ingress to occur at the base of the EMRS. The key-in trench shall be excavated until **one** of the following criteria has been met:

- A suitable clay formation has been encountered (similar material properties as used for the CCL),
- The trench has hit refusal due to bedrock, or

- A maximum depth of 3 m has been achieved.

The CCL shall be extended and used to backfill the trench forming a continuous liner. The CCL material should be placed in two lifts, compacting as best as reasonably possible with appropriate equipment. In areas where bedrock outcrops occur at the base of the slope the CCL shall be formed over and blended into the bedrock formation to the final slope configuration. If a trench is terminated at the maximum depth of 3 m backfilling shall be conducted as described above. All vegetation shall be removed prior to the CCL and subsequent NCL being placed on any natural ground.

5.3 Non-Compacted Layer (NCL)

Fill material for the NCL shall consist of materials sourced from within the pit boundary. The NCL shall possess a minimum thickness of 1.0 m in all areas of the covered EMRS (measured perpendicular to the ground surface). The NCL shall be constructed in a minimum of two lifts to allow for track compaction of the materials.

Placement of the Overburden material shall be done in a manner that does not damage the CCL. Areas compacted too densely due to repeated traffic from construction equipment shall be loosened by ripping or scarifying as directed and approved by the CQC (for revegetation / rooting purposes).

To ensure adequate FoS of the cover, the overlying material should not be greater than two percentage points wet of in situ water content (Okane, 2020b).

6 CQC PROCEDURES

CQC personnel will take samples of the materials used for and in the Work, and perform various tests on the samples to ascertain that the materials being placed or already placed in the Work meet the specified requirements. Results of CQC testing will be subject to review by CQA personnel. CQA’s assessment of test results will be final and conclusive in determining compliance with the Technical Specifications unless otherwise noted by the Engineer.

Material control tests will be carried out on materials in excavations and stockpiles prior to compaction to determine the adequacy of the materials for use in the Work (Table 6.1 and Table 6.2). Record tests will be conducted on the materials in the completed portions of the Work following placement and compaction to confirm the adequacy of the Work, and to provide an as-built record of the workmanship achieved (Table 6.3). Record tests may also be used to modify the construction procedures if necessary.

The Owner shall give CQC personnel full cooperation in sample taking or conducting tests and shall render such assistance as is necessary to enable sampling and testing to be carried out expeditiously. The Owner shall allow sufficient time for the CQC to carry out the required test work in order to determine the acceptability of the placed materials.

Tests carried out by the CQC personnel will be performed in accordance with the principles and methods prescribed by the American Society for Testing and Materials (ASTM) and other such recognized authorities. These methods shall be modified to the extent necessary to consider local conditions and the particle sizes of the materials specified. The following schedule of quality control testing is anticipated. However, the CQA or Engineer may modify the testing and rates of testing during the Work (for example CQA may reduce testing frequencies as the Work progresses).

Table 6.1: Control Testing Frequency in Pit Boundary

Material	Field Index Test (Materials Selection Guide)	Observations for Deleterious Materials
CCL	Continuous	Continuous

Table 6.2: Control Testing Frequency for Fill Materials after Placement

Material	Construction Oversight	Water Content (ASTM D2216-19)	Particle Size / Hydrometer (ASTM D6913M- 17, D7928-17)	Plasticity (ASTM D4318-00)	Proctor Compaction Testing (ASTM D698-12e2)
CCL	Continuous	1 per 1,000 m ³	1 per 1,000 m ³	1 per 1,000 m ³	1 per 4,000 m ³
NCL	Continuous	1 per 2,000 m ³	1 per 3,000 m ³		

Table 6.3: Record Testing Frequency for As-built CCL (after compaction)

Material	Water content (ASTM D2216-19)	Nuclear Gauge Density and Water Content (ASTM D6938-07b)	In Situ Hydraulic Conductivity (ASTM D6391-11)
CCL	1 per 1 nuclear gauge test sites*	13/ha/lift	1 per 1 ha

* NOTE: Water contents are done as a check for the nuclear gauge; frequency may change based on accuracy of the nuclear gauge.

Okane suggests a grid be established to predetermine locations for the tests outlined in Table 6.3. Sampling grids will be staggered for successive lifts to ensure overlap of sampling locations does not occur. The maximum depth on the nuclear densometer should be used during density tests after the second lift of the CCL has been placed. Water contents sampled at nuclear densometer locations should be taken at the location of the nuclear densometer test site to allow for assessment of the nuclear densometer's accuracy.

Hydraulic conductivity testing of the CCL will be completed by Okane personnel at a frequency noted in Table 6.3. When an appropriate proctor curve can not be selected, the hydraulic conductivity of a material may be used for a final approval of a panel in conjunction with confirmation that the material is compacted to its maximum dry density using the method described in Section 5.2.3. All approval under these circumstances are subject to review by the CQA and Engineer.

General locations for hydraulic conductivity testing will be identified by the CQA. Typically, these will be areas of concern or where variability in the CCL was noted. Within these areas of interest, if a hydraulic conductivity test fails, the estimated failing area will be delineated based on field notes and other documentation. An area outside of this zone will be subsequently selected to complete another hydraulic conductivity to confirm the remainder of the area/panel meets specification. The CQA will then determine if the failed area requires rework based on the testing results, location, and total estimated effected area.

6.1 Allowable Variations and Corrective Actions

The recommended allowance for failed as-built tests are presented in Table 6.4. A number of as-built tests can be expected to fail, due either to variability of the soil, the compaction process, or measurement errors. If it is suspected that a test result is erroneous, additional tests shall be made in its immediate vicinity. If the additional tests produce satisfactory results, the suspected test can be disregarded.

Table 6.4: Recommended Percentage of failed as-built tests for the CCL

Parameter	Maximum allowed percentage of failed tests	Allowable failed tests
Water content	3% (not concentrated in one area).	2 percentage points dry of allowable range or 3 percentage points wet of allowable range
Dry Density	3% (not concentrated in one area)	No tests lower than 90% standard compaction
Hydraulic Conductivity	5% (not concentrated in one area)	No tests greater than 5×10^{-9} m/s

A failed hydraulic conductivity test may indicate a failed test installation as opposed to an unacceptably high hydraulic conductivity. If a hydraulic conductivity test fails CQA will implement at least one additional test in the affected area. CQA will make a decision as to whether the area needs to be reworked pending the results of additional testing and a review of available CQA data for the area. No more than 5% of failed hydraulic conductivity tests will be allowed for the landform in total.

No more than 5% of final lift thickness determinations shall be allowed as outliers, per panel of CCL placed. In the CCL area within each panel, no more than 5% of the area as defined by the heat map provided by CQC shall be outside specification.

If it is determined that an area does not conform to specification, the area should be repaired. The extent of the area in question should be determined by the CQC based on passing tests. The most likely cause for failing tests will be inadequate compaction or water contents outside of the specified ranges. To rectify the problem, additional passes with the compaction equipment may be necessary. If the water content is outside the specified range the CCL may need to be scarified prior to re-compaction. Final approval of the panel is at the discretion of the CQA/Engineer.

7 DOCUMENTATION

Daily summary reporting and documentation procedures are required from CQC personnel. Documentation should include the following information:

- Project name, location, date, and personnel involved in major activities,
- Description of weather conditions (temperature, cloud cover, and precipitation);
- Summaries of any meetings held and actions recommended or taken as a result;
- Specific work units and locations of construction underway during that day;
- Equipment and personnel being used in each task;
- Calibrations or recalibrations of equipment, including actions taken as a result of recalibration;
- Descriptions of materials selected for use in the CCL;
- Decisions made regarding approval Work, and corrective actions to be taken in instances of where Work or materials were found inadequate;
- All survey data with respect to panel as-builts;
- Testing and sampling completed; and
- Signature of CQC.

8 REFERENCES

Amec Foster Wheeler (AMEC). 2017. Rainy River Project Development Clay Borrow Characterization. Technical memorandum prepared for New Gold Inc.

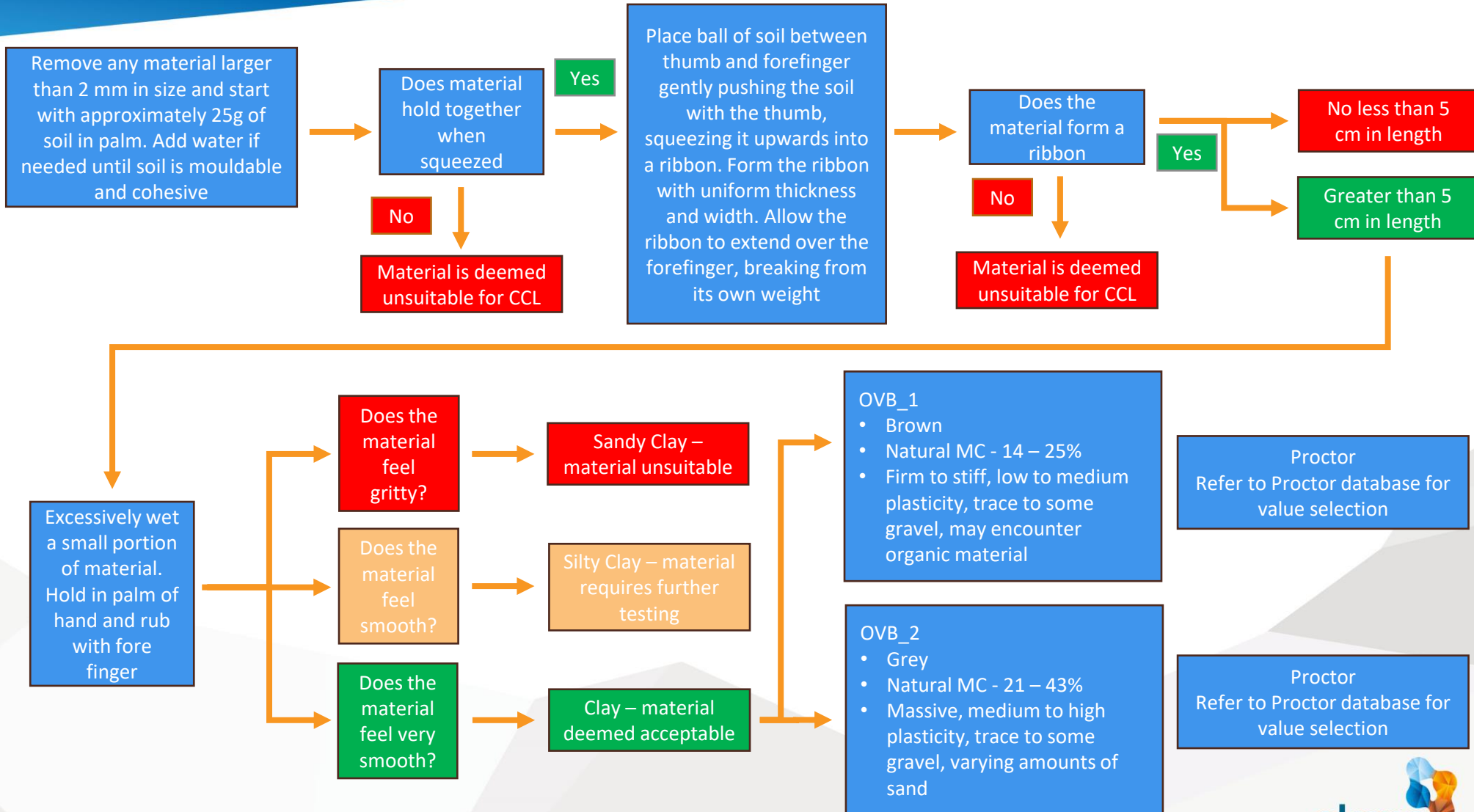
Okane Consultants Inc. (Okane). 2020a. *1003-019-008 EMRS Compaction Field Testing Summary Report*. Report prepared for New Gold Inc. August 2020.

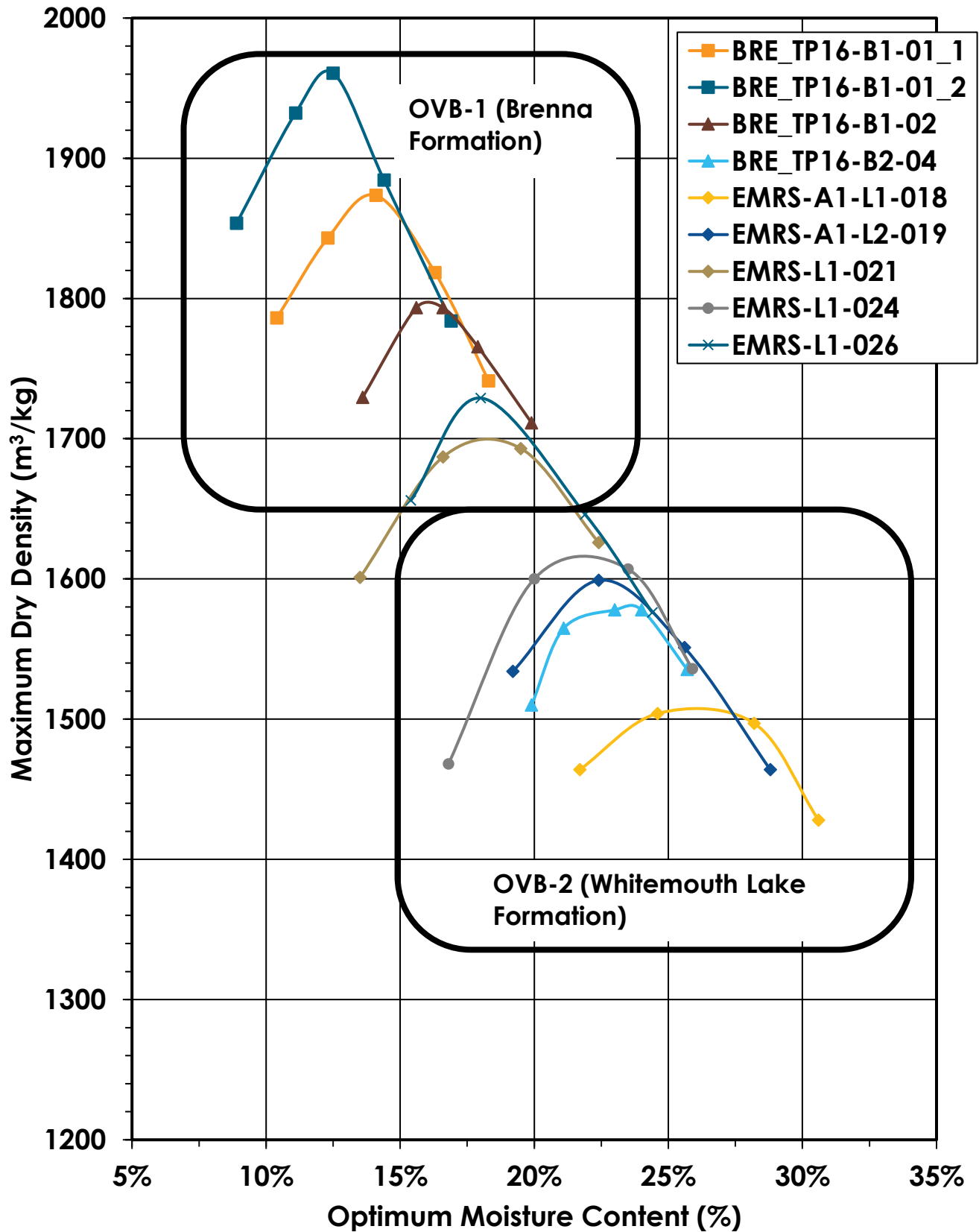
Okane Consultants Inc. (Okane). 2020b. *1003-019-007 Veneer Stability Analysis*. Memorandum prepared for New Gold Inc. July 2020.

Attachment A

Material Selection Guide

CCL Material Selection Process





Sample ID	In Situ Water Content (%)	Standard Proctor Max Dry Density (kg/m ³)	Optimum Water Content (%)
BRE_TP16-B1-01_1	16.5	1874	14.1
BRE_TP16-B1-01_2	15.6	1961	12.0
BRE_TP16-B1-02	16.6	1796	16.0
BRE_TP16-B2-04	22.1	1578	23.5
EMRS-A1-L1-018	31.2	1512	26.3
EMRS-A1-L2-019	28.5	1600	22.3
EMRS-L1-021	27.5	1700	18.2
EMRS-L1-024	24.2	1621	21.9
EMRS-L1-026	21.0	1729	18.0



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Appendix B

Summary of Laboratory Results

ATTACHMENT A – 2022 Laboratory & Field Results

Table A1: Laboratory Testing Summary – 2022

Date Sampled	Sample Location	Panel	Lift	MC	Atterberg	Hydrometer	Proctor
28-Apr-22	S499	SP	N/A	✓	-	-	-
28-Apr-22	S500	SP	N/A	✓	-	-	-
28-Apr-22	S501	SP	N/A	✓	-	-	-
28-Apr-22	S502	SP	N/A	✓	-	-	-
28-Apr-22	S503	SP	N/A	✓	-	-	-
28-Apr-22	S504	SP	N/A	✓	-	-	-
28-Apr-22	S505	SP	N/A	✓	-	-	-
28-Apr-22	S499	SP	N/A	-	✓	-	-
28-Apr-22	S500	SP	N/A	-	✓	-	-
28-Apr-22	S501	SP	N/A	-	✓	-	-
28-Apr-22	S499	SP	N/A	-	-	-	✓
28-Apr-22	S500	SP	N/A	-	-	✓	-
28-Apr-22	S501	SP	N/A	-	-	✓	-
28-Apr-22	S502	SP	N/A	-	-	✓	-
28-Apr-22	S500	SP	N/A	-	-	-	✓
28-Apr-22	S501	SP	N/A	-	-	-	✓
28-Apr-22	S502	SP	N/A	-	-	✓	-
28-Apr-22	S503	SP	N/A	-	-	✓	-
28-Apr-22	S502	SP	N/A	-	✓	-	-
28-Apr-22	S503	SP	N/A	-	✓	-	-
28-Apr-22	S504	SP	N/A	-	✓	-	-
28-Apr-22	S505	SP	N/A	-	✓	-	-
28-Apr-22	S502	SP	N/A	-	-	-	✓
28-Apr-22	S503	SP	N/A	-	-	-	✓
28-Apr-22	S504	SP	N/A	-	-	-	✓
28-Apr-22	S505	SP	N/A	-	-	-	✓
28-Apr-22	S504	SP	N/A	-	-	✓	-
28-Apr-22	S505	SP	N/A	-	-	✓	-
03-May-22	S506	SP	N/A	✓	-	-	-

Date Sampled	Sample Location	Panel	Lift	MC	Atterberg	Hydrometer	Proctor
03-May-22	S507	SP	N/A	✓	-	-	-
03-May-22	S506	SP	N/A	-	✓	-	-
03-May-22	S507	SP	N/A	-	✓	-	-
03-May-22	S506	SP	N/A	-	-	✓	-
03-May-22	S507	SP	N/A	-	-	✓	-
03-May-22	S506	SP	N/A	-	-	-	✓
03-May-22	S507	SP	N/A	-	-	-	✓
18-May-22	S508	SP	N/A	-	✓	-	-
18-May-22	S508	SP	N/A	-	-	✓	-
18-May-22	S508	SP	N/A	✓	-	-	-
18-May-22	S508	SP	N/A	-	-	-	✓
23-May-22	S509	P30	L1	✓	-	-	-
25-May-22	S510	P30	L1	✓	-	-	-
25-May-22	S511	P30	L1	✓	-	-	-
25-May-22	S512	P30	L1	✓	-	-	-
25-May-22	S513	P30	L1	✓	-	-	-
25-May-22	S514	P30	L1	✓	-	-	-
25-May-22	S515	P30	L1	✓	-	-	-
26-May-22	S516	P30	L1	✓	-	-	-
26-May-22	S517	P30	L1	✓	-	-	-
26-May-22	S518	P30	L1	✓	-	-	-
26-May-22	S519	P30	L1	✓	-	-	-
26-May-22	S520	P30	L1	✓	-	-	-
26-May-22	S521	P30	L1	✓	-	-	-
27-May-22	S522	P30	L2	✓	-	-	-
27-May-22	S523	P30	L2	✓	-	-	-
27-May-22	S524	P30	L2	✓	-	-	-
27-May-22	S525	P30	L2	✓	-	-	-
27-May-22	S526	P30	L2	✓	-	-	-
27-May-22	S527	P30	L2	✓	-	-	-
27-May-22	S528	P30	L2	✓	-	-	-
27-May-22	S529	P30	L2	✓	-	-	-

Date Sampled	Sample Location	Panel	Lift	MC	Atterberg	Hydrometer	Proctor
27-May-22	S530	P30	L2	✓	-	-	-
27-May-22	S531	P30	L2	✓	-	-	-
27-May-22	S532	P30	L2	✓	-	-	-
27-May-22	S533	P30	L2	✓	-	-	-
23-May-22	S509	P30	L1	-	✓	-	-
23-May-22	S509	P30	L1	-	-	✓	-
23-May-22	S509	P30	L1	-	-	-	✓
25-May-22	S514	P30	L1	-	✓	-	-
25-May-22	S515	P30	L1	-	✓	-	-
25-May-22	S514	P30	L1	-	-	✓	-
25-May-22	S515	P30	L1	-	-	✓	-
25-May-22	S514	P30	L1	-	-	-	✓
26-May-22	S521	P30	L1	-	✓	-	-
27-May-22	S523	P30	L2	-	✓	-	-
27-May-22	S532	P30	L2	-	✓	-	-
26-May-22	S521	P30	L1	-	-	✓	-
27-May-22	S23	P30	L2	-	-	✓	-
27-May-22	S532	P30	L2	-	-	✓	-
29-May-22	S534	P30	L3	✓	-	-	-
29-May-22	S534	P30	L3	-	-	✓	-
29-May-22	S534	P30	L3	-	✓	-	-
29-May-22	S534	P30	L3	-	-	-	✓
15-Jun-22	S535	SP	N/A	-	✓	-	-
15-Jun-22	S535	SP	N/A	-	-	✓	-
15-Jun-22	S535	SP	N/A	-	-	-	✓
15-Jun-22	S535	SP	N/A	✓	-	-	-
15-Jun-22	S536	SP	N/A	✓	-	-	-
15-Jun-22	S537	SP	N/A	✓	-	-	-
15-Jun-22	S538	SP	N/A	✓	-	-	-
15-Jun-22	S536	SP	N/A	-	✓	-	-
15-Jun-22	S536	SP	N/A	-	-	✓	-
15-Jun-22	S536	SP	N/A	-	-	-	✓

Date Sampled	Sample Location	Panel	Lift	MC	Atterberg	Hydrometer	Proctor
15-Jun-22	S537	SP	N/A	-	✓	-	-
15-Jun-22	S537	SP	N/A	-	-	✓	-
15-Jun-22	S537	SP	N/A	-	-	-	✓
15-Jun-22	S538	SP	N/A	-	✓	-	-
15-Jun-22	S538	SP	N/A	-	-	✓	-
15-Jun-22	S538	SP	N/A	-	-	-	✓
01-Jul-22	S539	P30	L2	✓	-	-	-
01-Jul-22	S540	P30	L2	✓	-	-	-
01-Jul-22	S541	P30	L2	✓	-	-	-
01-Jul-22	S542	P30	L2	✓	-	-	-
01-Jul-22	S543	P30	L3	✓	-	-	-
04-Jul-22	S544	SP	N/A	✓	-	-	-
05-Jul-22	S546	P31	L1	-	✓	-	-
04-Jul-22	S544	SP	N/A	-	-	-	✓
05-Jul-22	S545	P31	L1	✓	-	-	-
05-Jul-22	S546	P31	L1	✓	-	-	-
05-Jul-22	S547	P31	L1	✓	-	-	-
05-Jul-22	S548	P31	L1	✓	-	-	-
05-Jul-22	S549	P31	L1	✓	-	-	-
06-Jul-22	S551	P31	L2	-	✓	-	-
06-Jul-22	S550	P31	L2	✓	-	-	-
06-Jul-22	S551	P31	L2	✓	-	-	-
06-Jul-22	S552	P31	L2	✓	-	-	-
06-Jul-22	S553	P31	L2	✓	-	-	-
06-Jul-22	S554	P31	L2	✓	-	-	-
05-Jul-22	S546	P31	L1	-	-	✓	-
06-Jul-22	S551	P31	L2	-	-	✓	-
08-Jul-22	S555	P31	L3	✓	-	-	-
09-Jul-22	S556	P30	L4	✓	-	-	-
09-Jul-22	S557	P30	L4	✓	-	-	-
08-Jul-22	S555	P31	L3	-	-	✓	-
09-Jul-22	S556	P30	L4	-	-	✓	-

Date Sampled	Sample Location	Panel	Lift	MC	Atterberg	Hydrometer	Proctor
12-Jul-22	S558	SP	N/A	✓	-	-	-
12-Jul-22	S558	SP	N/A	-	-	-	✓
14-Jul-22	S559	P32	L1	✓	-	-	-
14-Jul-22	S560	P32	L1	✓	-	-	-
14-Jul-22	S561	P32	L1	✓	-	-	-
14-Jul-22	S562	P32	L1	✓	-	-	-
14-Jul-22	S563	P32	L1	✓	-	-	-
14-Jul-22	S563	P32	L1	-	✓	-	-
15-Jul-22	S564	P31	L4	✓	-	-	-
15-Jul-22	S565	P32	L2	✓	-	-	-
15-Jul-22	S566	P32	L2	✓	-	-	-
15-Jul-22	S567	P32	L2	✓	-	-	-
15-Jul-22	S568	P32	L2	✓	-	-	-
15-Jul-22	S569	P32	L2	✓	-	-	-
14-Jul-22	S563	P32	L1	-	-	✓	-
15-Jul-22	S568	P32	L2	-	-	✓	-
16-Jul-22	S570	SP	N/A	✓	-	-	-
15-Jul-22	S568	P32	L2	-	✓	-	-
16-Jul-22	S570	SP	N/A	-	-	-	✓
21-Jul-22	S571	P32	L3	✓	-	-	-
22-Jul-22	S572	P33	L1	✓	-	-	-
22-Jul-22	S573	P33	L1	✓	-	-	-
22-Jul-22	S574	P33	L1	✓	-	-	-
22-Jul-22	S575	P33	L1	✓	-	-	-
22-Jul-22	S576	P33	L1	✓	-	-	-
22-Jul-22	S575	P33	L1	-	✓	-	-
22-Jul-22	S575	P33	L1	-	-	✓	-
22-Jul-22	S575	P33	L1	-	-	-	✓
29-Jul-22	S577	P33	L2	✓	-	-	-
29-Jul-22	S578	P33	L2	✓	-	-	-
29-Jul-22	S579	P33	L2	✓	-	-	-
29-Jul-22	S580	P33	L2	✓	-	-	-

Date Sampled	Sample Location	Panel	Lift	MC	Atterberg	Hydrometer	Proctor
29-Jul-22	S581	P33	L2	✓	-	-	-
29-Jul-22	S582	P33	L2	✓	-	-	-
30-Jul-22	S583	P32	L4	✓	-	-	-
30-Jul-22	S584	P33	L3	✓	-	-	-
29-Jul-22	S580	P33	L2	-	✓	-	-
29-Jul-22	S580	P33	L2	-	-	✓	-
30-Jul-22	S584	P33	L3	-	-	✓	-
29-Jul-22	S580	P33	L2	-	-	-	✓
02-Aug-22	S585	P33	L4	✓	-	-	-

Table A2: Laboratory Moisture Contents – 2022

Date Sampled	Date Tested	Sample Location	Lab Moisture Content (%)
28-Apr-22	29-Apr-22	S499	23
28-Apr-22	29-Apr-22	S500	18.8
28-Apr-22	29-Apr-22	S501	40.2
28-Apr-22	29-Apr-22	S502	21.8
28-Apr-22	29-Apr-22	S503	21.6
28-Apr-22	30-Apr-22	S504	31.4
28-Apr-22	30-Apr-22	S505	29.8
03-May-22	11-May-22	S506	39.3
03-May-22	11-May-22	S507	36.2
18-May-22	18-May-22	S508	35.4
23-May-22	24-May-22	S509	24.3
25-May-22	26-May-22	S510	29.7
25-May-22	26-May-22	S511	33.0
25-May-22	26-May-22	S512	29.1
25-May-22	26-May-22	S513	34.8
25-May-22	26-May-22	S514	26.7
25-May-22	26-May-22	S515	25.6
26-May-22	27-May-22	S516	32.3

Date Sampled	Date Tested	Sample Location	Lab Moisture Content (%)
26-May-22	27-May-22	S517	24.9
26-May-22	27-May-22	S518	25.7
26-May-22	27-May-22	S519	24.0
26-May-22	27-May-22	S520	26.2
26-May-22	27-May-22	S521	32.7
27-May-22	28-May-22	S522	23.0
27-May-22	28-May-22	S523	24.0
27-May-22	28-May-22	S524	24.9
27-May-22	28-May-22	S525	24.7
27-May-22	28-May-22	S526	28.8
27-May-22	28-May-22	S527	23.5
27-May-22	28-May-22	S528	23.5
27-May-22	28-May-22	S529	28.0
27-May-22	28-May-22	S530	24.4
27-May-22	28-May-22	S531	24.4
27-May-22	28-May-22	S532	23.1
27-May-22	28-May-22	S533	25.6
29-May-22	30-May-22	S534	23.8
15-Jun-22	17-Jun-22	S535	26.9
15-Jun-22	17-Jun-22	S536	22.0
15-Jun-22	17-Jun-22	S537	27.1
15-Jun-22	17-Jun-22	S538	30.6
01-Jul-22	02-Jul-22	S539	22.7
01-Jul-22	02-Jul-22	S540	26.6
01-Jul-22	02-Jul-22	S541	21.0
01-Jul-22	02-Jul-22	S542	21.9
01-Jul-22	02-Jul-22	S543	19.7
04-Jul-22	05-Jul-22	S544	28.6
05-Jul-22	06-Jul-22	S545	25.4
05-Jul-22	06-Jul-22	S546	24.6

Date Sampled	Date Tested	Sample Location	Lab Moisture Content (%)
05-Jul-22	06-Jul-22	S547	24.9
05-Jul-22	06-Jul-22	S548	24.8
05-Jul-22	06-Jul-22	S549	32.6
06-Jul-22	07-Jul-22	S550	28.1
06-Jul-22	07-Jul-22	S551	23.5
06-Jul-22	07-Jul-22	S552	21.0
06-Jul-22	07-Jul-22	S553	21.1
06-Jul-22	07-Jul-22	S554	21.9
08-Jul-22	09-Jul-22	S555	21.7
09-Jul-22	10-Jul-22	S556	23.3
09-Jul-22	10-Jul-22	S557	21.4
12-Jul-22	15-Jul-22	S558	31.7
14-Jul-22	15-Jul-22	S559	30.3
14-Jul-22	15-Jul-22	S560	19.1
14-Jul-22	15-Jul-22	S561	22.2
14-Jul-22	15-Jul-22	S562	21.3
14-Jul-22	15-Jul-22	S563	23.1
15-Jul-22	16-Jul-22	S564	25.7
15-Jul-22	16-Jul-22	S565	27.1
15-Jul-22	16-Jul-22	S566	20.9
15-Jul-22	16-Jul-22	S567	31.3
15-Jul-22	16-Jul-22	S568	36.0
15-Jul-22	16-Jul-22	S569	26.3
16-Jul-22	17-Jul-22	S570	28.6
21-Jul-22	22-Jul-22	S571	28.2
22-Jul-22	23-Jul-22	S572	26.6
22-Jul-22	23-Jul-22	S573	22.9
22-Jul-22	23-Jul-22	S574	25.2
22-Jul-22	23-Jul-22	S575	28.1
22-Jul-22	23-Jul-22	S576	23.1

Date Sampled	Date Tested	Sample Location	Lab Moisture Content (%)
29-Jul-22	30-Jul-22	S577	26.8
29-Jul-22	30-Jul-22	S578	23.2
29-Jul-22	30-Jul-22	S579	26.0
29-Jul-22	30-Jul-22	S580	23.7
29-Jul-22	30-Jul-22	S581	25.4
29-Jul-22	30-Jul-22	S582	22.8
30-Jul-22	31-Jul-22	S583	24.7
30-Jul-22	31-Jul-22	S584	28.5

Table A3: Atterberg Limits – 2022

Date Sampled	Date Tested	Sample ID	Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
28-Apr-22	30-Apr-22	S499	36	14	22
28-Apr-22	30-Apr-22	S500	26	13	13
28-Apr-22	30-Apr-22	S501	49	19	30
28-Apr-22	03-May-22	S502	33	15	18
28-Apr-22	30-Apr-22	S503	37	16	21
28-Apr-22	30-Apr-22	S504	50	22	28
28-Apr-22	03-May-22	S505	44	18	26
03-May-22	12-May-22	S506	47	22	25
03-May-22	12-May-22	S507	48	21	27
18-May-22	19-May-22	S508	62	18	44
23-May-22	28-May-22	S509	38	13	25
25-May-22	29-May-22	S514	43	15	28
25-May-22	29-May-22	S515	44	16	28
26-May-22	30-May-22	S521	53	19	34
27-May-22	30-May-22	S523	41	15	26
27-May-22	30-May-22	S532	48	14	34
29-May-22	01-Jun-22	S534	45	15	30
15-Jun-22	17-Jun-22	S535	66	18	48

15-Jun-22	18-Jun-22	S536	31	12	19
15-Jun-22	19-Jun-22	S537	48	14	34
15-Jun-22	20-Jun-22	S538	39	13	26
05-Jul-22	06-Jul-22	S546	45	17	28
06-Jul-22	07-Jul-22	S551	47	15	32
14-Jul-22	16-Jul-22	S563	47	18	29
15-Jul-22	20-Jul-22	S568	53	18	35
22-Jul-22	24-Jul-22	S575	46	14	32
29-Jul-22	30-Jul-22	S580	44	18	26

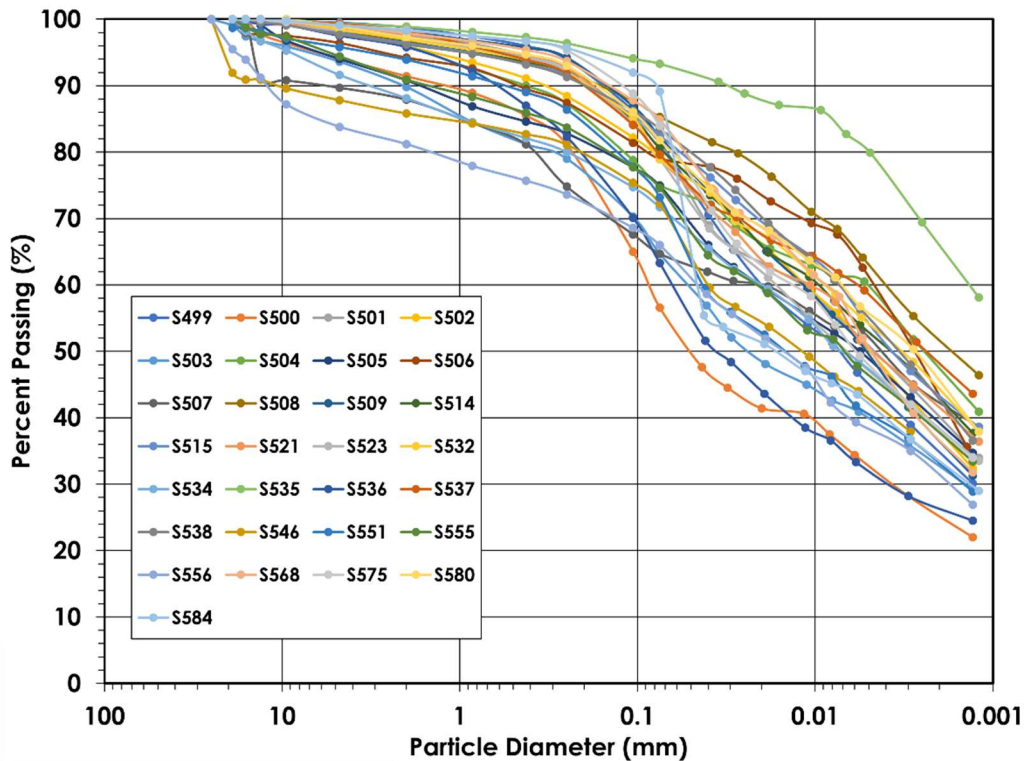


Figure A1: Hydrometer Data – 2022

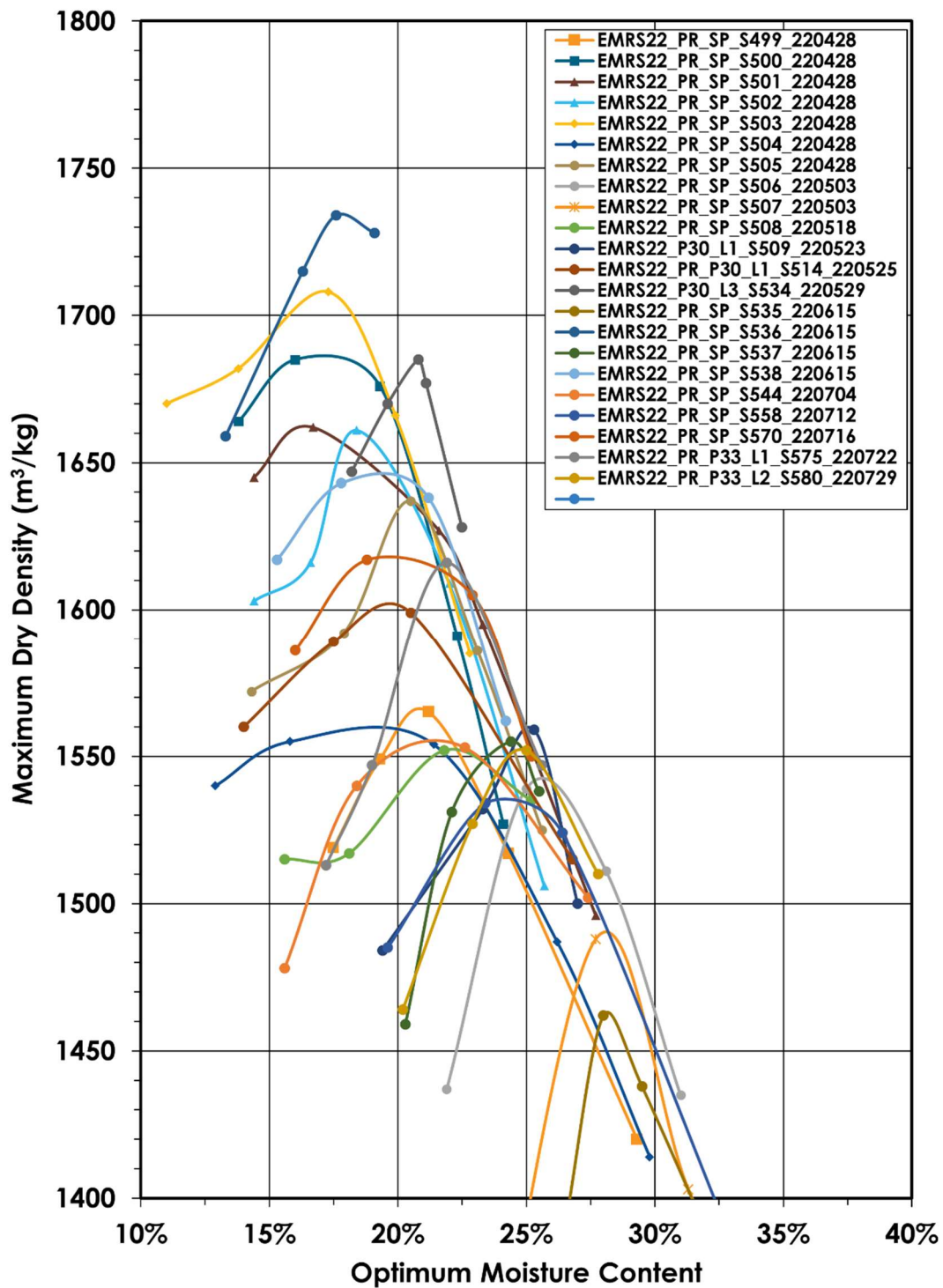


Figure A2: Laboratory Proctor Curves 2022

Table A4: Nuclear Densometer Results – 2022

Date Sampled	Density ID	Field Moisture Content (%)	Field Dry Density (kg/m³)	Field Wet Density (kg/m³)
1-Sep-21	D416	30.5	1465	1912
1-Sep-21	D417	22.9	1592	1957
1-Sep-21	D418	31.1	1465	1921
1-Sep-21	D419	24.4	1525	1898
1-Sep-21	D420	31	1449	1898
1-Sep-21	D421	31.1	1497	1963
6-Sep-21	D422	26.1	1536	1937
6-Sep-21	D423	22.3	1630	1994
6-Sep-21	D424	28.7	1479	1903
6-Sep-21	D425	26.4	1544	1951
6-Sep-21	D426	23.7	1578	1952
6-Sep-21	D427	22.5	1602	1962
6-Sep-21	D428	29.1	1500	1936
6-Sep-21	D429	23.8	1534	1923
11-Sep-21	D430	30.1	1496	1947
11-Sep-21	D431	24.7	1588	1981
11-Sep-21	D432	27.1	1545	1965
11-Sep-21	D433	26.9	1530	1942
11-Sep-21	D434	28.2	1516	1944
11-Sep-21	D435	33.1	1460	1944
11-Sep-21	D436	40.5	1341	1884
11-Sep-21	D437	21.4	1615	1961
11-Sep-21	D438	27.8	1541	1977
11-Sep-21	D439	28.9	1543	1989
11-Sep-21	D440	24.8	1595	1991
11-Sep-21	D441	27.3	1497	1906
11-Sep-21	D442	24	1600	1983
11-Sep-21	D443	27.2	1553	1975
19-Sep-21	N/A	28.6	1503	1933

Date Sampled	Density ID	Field Moisture Content (%)	Field Dry Density (kg/m ³)	Field Wet Density (kg/m ³)
25-May-22	D458	22.8	1640	2013
25-May-22	D459	26.4	1551	1963
25-May-22	D460	20.3	1620	1948
25-May-22	D461	26.3	1551	1960
25-May-22	D462	24.7	1601	1997
25-May-22	D463	26.3	1562	1974
25-May-22	D464	24.1	1594	1978
25-May-22	D465	26.8	1548	1962
25-May-22	D466	24.3	1561	1940.7
25-May-22	D467	24.9	1605.3	2005.3
25-May-22	D468	24.6	1572.9	1960.3
25-May-22	D469	23.2	1595	1964.4
25-May-22	D470	24.9	1567.6	1957.4
25-May-22	D471	22.5	1618.1	1981.8
25-May-22	D472	24.7	1639.7	2044.4
27-May-22	D473	27.1	1573.3	1999.9
27-May-22	D474	26.9	1535.9	1949.5
27-May-22	D475	22.4	1613.6	1974.2
27-May-22	D476	28.6	1529.9	1967.3
27-May-22	D477	29.6	1508.9	1955.3
27-May-22	D478	28.1	1523.7	1951.8
27-May-22	D479	30.1	1444	1878.3
27-May-22	D480	24.2	1590.6	1975.5
27-May-22	D481	28.9	1532.4	1975.5
27-May-22	D482	29.4	1473.4	1905.2
27-May-22	D483	26.4	1503.3	1899.8
27-May-22	D484	26	1534.6	1940.1
27-May-22	D485	23.7	1589.5	1965.5
27-May-22	D486	16	1622.6	1882
01-Jul-22	D487	22.7	1571.8	1927.9

Date Sampled	Density ID	Field Moisture Content (%)	Field Dry Density (kg/m ³)	Field Wet Density (kg/m ³)
01-Jul-22	D488	22.6	1594.8	1955.4
01-Jul-22	D489	20.4	1588.9	1912.9
01-Jul-22	D490	28.6	1527.4	1963.5
05-Jul-22	D491	32.4	1459	1932
05-Jul-22	D492	23	1620.8	1993.8
05-Jul-22	D493	27	1512.3	1924.8
05-Jul-22	D494	24	1555.9	1929.2
05-Jul-22	D495	23.2	1611.1	1985.5
06-Jul-22	D496	20.7	1677.7	2025
06-Jul-22	D497	22.5	1611.4	1974.3
06-Jul-22	D498	30.5	1465	1912
06-Jul-22	D499	22.9	1592	1957
06-Jul-22	D500	31.1	1465	1921
14-Jul-22	D501	24.4	1525	1898
14-Jul-22	D502	31	1449	1898
14-Jul-22	D503	31.1	1497	1963
14-Jul-22	D504	26.1	1536	1937
14-Jul-22	D505	22.3	1630	1994
14-Jul-22	D506	28.7	1479	1903
15-Jul-22	D507	26.4	1544	1951
15-Jul-22	D508	23.7	1578	1952
15-Jul-22	D509	22.5	1602	1962
15-Jul-22	D510	29.1	1500	1936
15-Jul-22	D511	23.8	1534	1923
15-Jul-22	D512	30.1	1496	1947
15-Jul-22	D513	24.7	1588	1981
22-Jul-22	D514	27.1	1545	1965
22-Jul-22	D515	26.9	1530	1942
22-Jul-22	D516	28.2	1516	1944
22-Jul-22	D517	33.1	1460	1944

Date Sampled	Density ID	Field Moisture Content (%)	Field Dry Density (kg/m ³)	Field Wet Density (kg/m ³)
22-Jul-22	D518	40.5	1341	1884
29-Jul-22	D519	21.4	1615	1961
29-Jul-22	D520	27.8	1541	1977
29-Jul-22	D521	28.9	1543	1989
29-Jul-22	D522	24.8	1595	1991
29-Jul-22	D523	27.3	1497	1906
29-Jul-22	D524	24	1600	1983
29-Jul-22	D525	27.2	1553	1975
29-Jul-22	D526	28.6	1503	1933

ATTACHMENT B – 2022 Third-Party Sample Results

The following test results are from a sample taken in close proximity to Tulloch sample location S534 (Lift 3, Panel 30, collected May 29, 2022) and was tested by P. Machibroda in Saskatoon, SK.

ASTM D5084: Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall

Project: New Gold Rainy River (1003-223)
Location: Near Rainy River, ON
Project no: 17444
Source: May Comparison S534
Sample No. 5
Material: CCL (Compacted Clay Liner)
Date: June 26, 2022

Sample Preparation: Remolded, Standard Proctor Effort

Testing Summary:

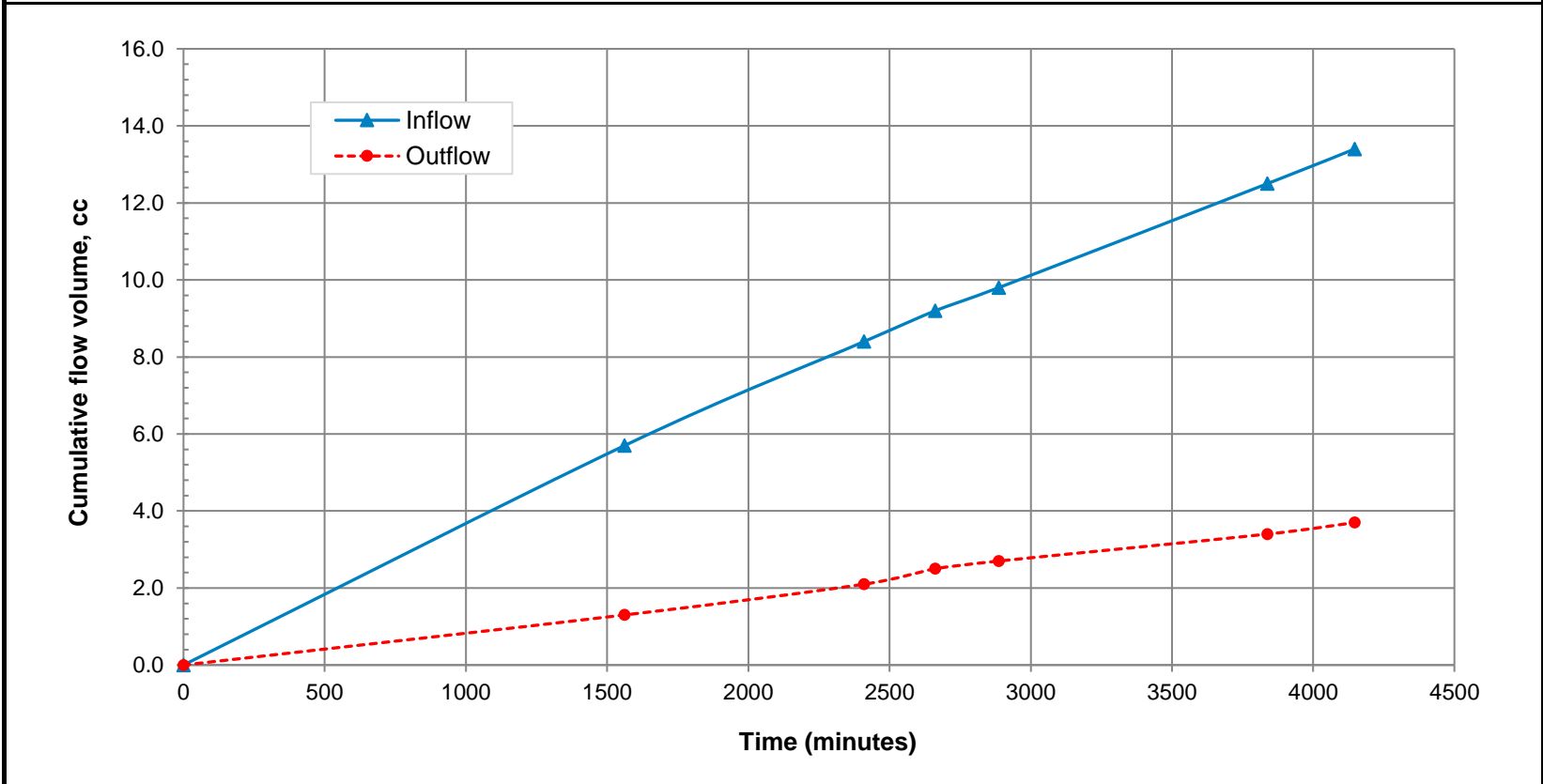
Cell Pressure = 300 kPa Head across sample = 70 cm Hydraulic gradient = 16.4
 Back pressure = 270 kPa

<u>Initial Conditions</u>	<u>Final Conditions</u>
Initial sample diameter = 68.43 mm	Final water content = 20.3 %
Initial sample height = 42.80 mm	Final wet density = 2096 kg/m ³
Initial sample volume = 157.4 cc	Final dry density (measured) = 1743 kg/m ³
Initial water content = 17.8 %	Wet unit weight = 20.6 KN/m ³
Initial dry density (calculated) = 1769 kg/m ³	Final degree of saturation = 100 %
Initial degree of saturation = 91.1 %	

Inflow Rate = 0.00027 cc/min
Outflow Rate = 0.00007 cc/min

Hydraulic Conductivity = 5E-11 m/s

Comment: Description of Sample: **Cl - Lean Clay with Sand**



WE CERTIFY TESTING PROCEDURES ARE IN ACCORDANCE WITH ASTM D5084 STANDARD
 P. MACHIBRODA ENGINEERING LTD.

PER *Pastor Schenqevitch*

LIQUID LIMIT, PLASTIC LIMIT, AND PLASTICITY INDEX TEST REPORT

ASTM DESIGNATION D4318: Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
 ASTM DESIGNATION D2216: Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass

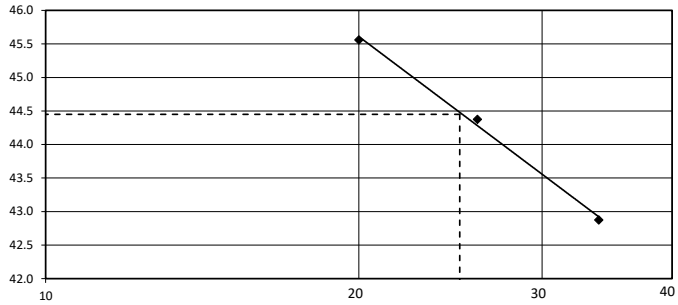


806 48th Street East, Saskatoon, Saskatchewan, S7K 3Y4
 Phone: 306-665-8444
 Email: lab.sk@machibroda.com

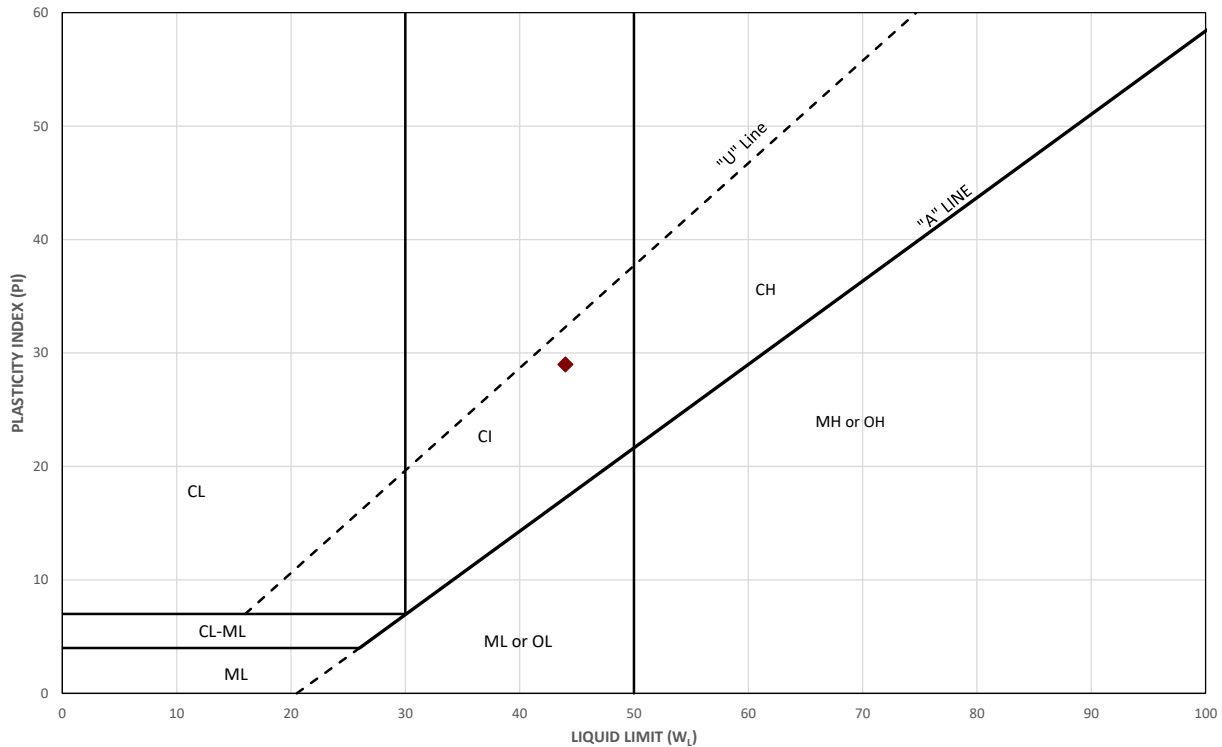
PROJECT NUMBER:	<u>17444</u>	BOREHOLE:	<u>---</u>
PROJECT:	<u>New Gold Rainy River (1003-223)</u>	DEPTH (ft):	<u>---</u>
LOCATION:	<u>Near Rainy River, ON</u>	SAMPLE NUMBER:	<u>5</u>
DATE TESTED:	<u>July 4, 2022</u>	SAMPLED BY:	<u>O'Kane Consultants Inc.</u>
TECHNICIAN:	<u>T. Gerasimova</u>	DATE SAMPLED:	<u>---</u>
SOURCE:	<u>May Comparison S534</u>	DATE RECEIVED:	<u>June 22, 2022</u>

LIQUID LIMIT: 44
PLASTIC LIMIT: 15
PLASTICITY INDEX: 29

SAMPLE DESCRIPTION: Cl - Medium Plastic
 WATER (MOISTURE) CONTENT METHOD (%): B
 AS RECEIVED MOISTURE CONTENT (%): 25.4
 SPECIMEN PREPARATION PROCEDURE: 2 (Oven Dried)
 SPECIAL SELECTION PROCESS USED: ---
 PLASTIC LIMIT PROCEDURE: 1
 LIQUID LIMIT METHOD: A
 LIQUID LIMIT DEVICE: Mechanical
 GROOVING TOOL: Plastic



PLASTICITY CHART FOR CLASSIFICATION OF FINE GRAINED SOILS



REVIEWED BY: *Preston Schergevitch*
 Preston Schergevitch, A.Sc.T.

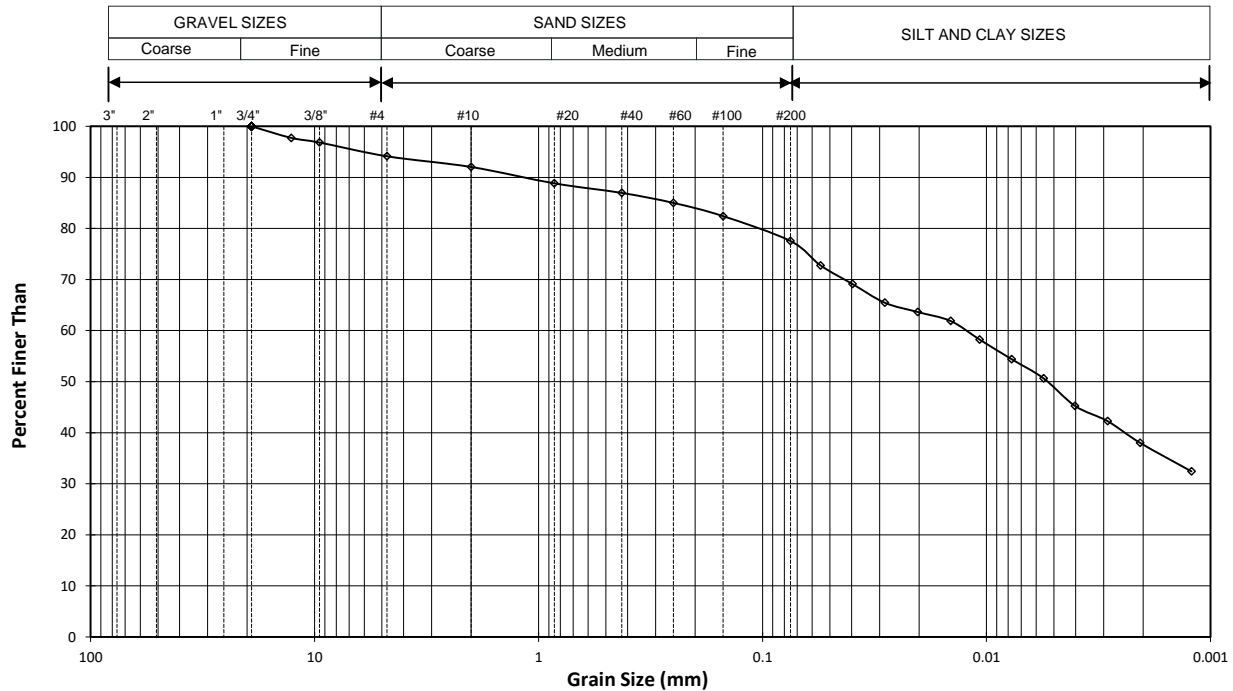
Project: New Gold Rainy River (1003-223)
Location: Near Rainy River, ON
Project No.: 17444
Date Tested: June 27, 2022
Source: May Comparison S534
Sample No.: 5
Sample Description: CCL (Compacted Clay Liner) - CI - Lean Clay with Sand

Sieve Analysis:			Hydrometer Analysis:		
Sieve	Diameter mm	% Finer	Diameter mm	% Finer	
1.5"	38.1	100	0.0550	72.7	
1"	25.4	100	0.0396	69.1	
3/4"	19.1	100	0.0285	65.5	
1/2"	12.7	98	0.0203	63.6	
3/8"	9.5	97	0.0145	61.9	
# 4	4.75	94	0.0107	58.2	
# 10	2	92	0.0077	54.4	
# 20	0.85	89	0.0056	50.6	
# 40	0.425	87.0	0.0040	45.2	
#60	0.25	85.0	0.0029	42.3	
# 100	0.15	82.4	0.0021	38.0	
# 200	0.075	77.5	0.0012	32.4	

Material Description:

% Gravel Sizes	% Sand Sizes	% Silt Sizes	% Clay Sizes
6	17	40	37

Remarks:



Drawing No.

17444-5

WE CERTIFY TESTING PROCEDURES ARE IN ACCORDANCE
WITH AASHTO T 88 STANDARD
P. MACHIBRODA ENGINEERING LTD.

PER *Prostern Schengevitch*

STANDARD PROCTOR MOISTURE-DENSITY RELATIONSHIP TEST REPORT

ASTM Designation D698: Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³))

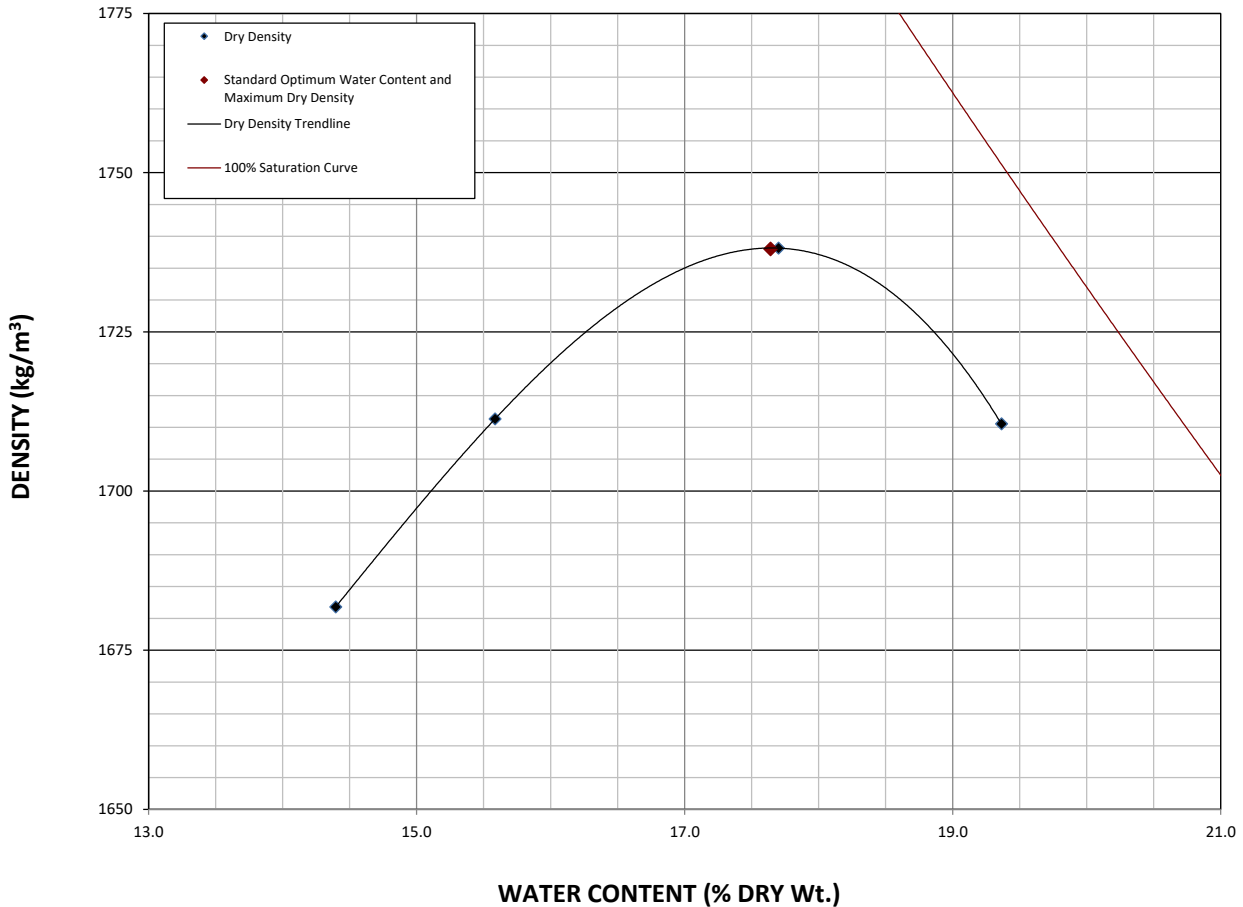


806 48th Street East, Saskatoon, Saskatchewan S7K 3Y4
 Phone: 306-665-8444
 Email: lab.sk@machibroda.com

PROJECT NO.: 17444
 PROJECT: New Gold Rainy River (1003-223)
 LOCATION: Near Rainy River, ON
 DATE TESTED: June 24, 2022
 TECHNICIAN: B. Sajeev
 SOURCE: May Comparison S534

CLIENT: O'Kane Consultants Inc.
 SAMPLE NUMBER: 5
 SAMPLED BY: O'Kane Consultants Inc.
 DATE SAMPLED: ---
 DATE RECEIVED: June 22, 2022

TRIAL NUMBER	1	2	3	4	5
DRY DENSITY (kg/m ³)	1682	1711	1738	1711	
WATER CONTENT (%)	14.4	15.6	17.7	19.4	



SAMPLE DESCRIPTION: CCL (Compacted Clay Liner) - CI - Lean Clay with Sand

STANDARD OPTIMUM WATER CONTENT (%): 17.6

STANDARD MAXIMUM DRY DENSITY (kg/m³): 1738

CORRECTED STANDARD OPTIMUM WATER CONTENT (%): 16.7

CORRECTED STANDARD MAXIMUM DRY DENSITY (kg/m³): 1775

METHOD OF COMPACTION: METHOD A

PREPARATION METHOD: DRY

AS RECEIVED WATER CONTENT (%): 25.4

STANDARD MAXIMUM UNIT WEIGHT (Kn/m³): 17.04

TYPE OF RAMMER: Manual

MATERIAL RETAINED ON 4.75-mm SIEVE (%) (P_c): 6.0

MATERIAL PASSING THE 4.75-mm SIEVE (%) (P_s): 94.0

SPECIFIC GRAVITY (assumed): 2.65

REMARKS: _____



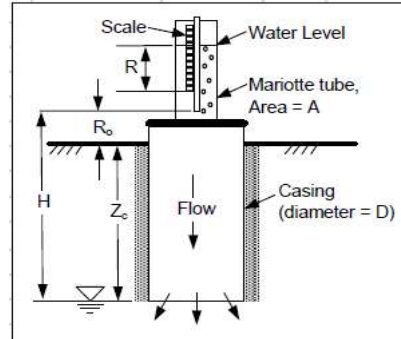
REVIEWED BY: Preston Schergevitch
 Preston Schergevitch, A.Sc.T.

ATTACHMENT C – 2022 Hydraulic Conductivity Results

**Borehole Hydraulic Conductivity Test
ASTM D 6391 Method C**



Project:	1003-223
Date:	22-Jul-22
Test ID:	BP29
Installer:	BW
Analyst:	TBD



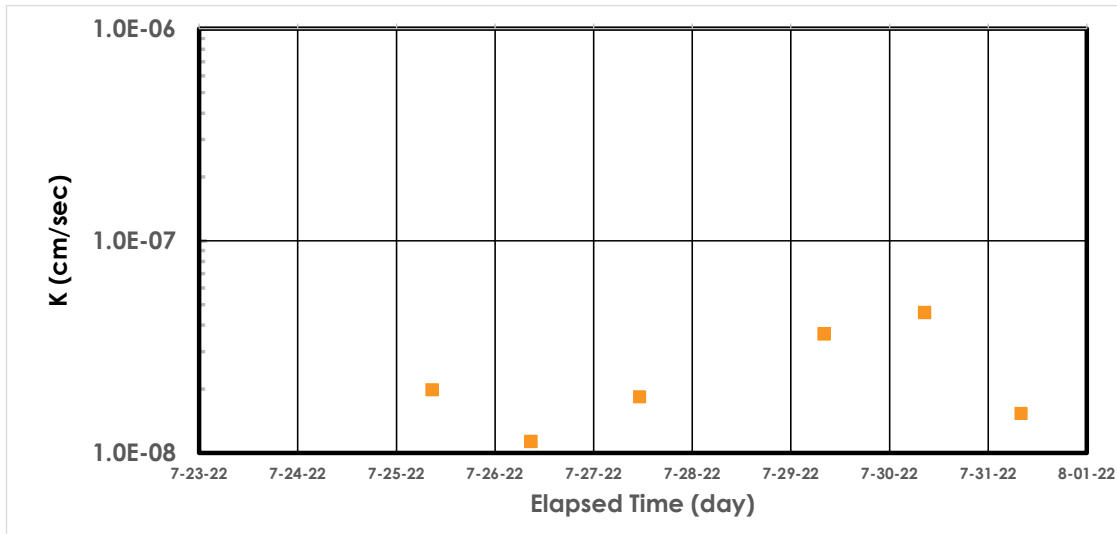
Fixed Variables:

Casing Diameter, D	cm	30	
Standpipe Inner Diameter, D	cm	6.8	
Mariotte Outer Diameter, D	cm	1	
Standpipe Inner Area	cm ²	2.2	(Inner Tube Test)
Bubble Pt Elevation, R _o	cm	12.5	
Casing Embedment, Z _c	cm	22.5	
TEG (yes/no)	yes/no	no	

Temporal Field Data:

Computations:

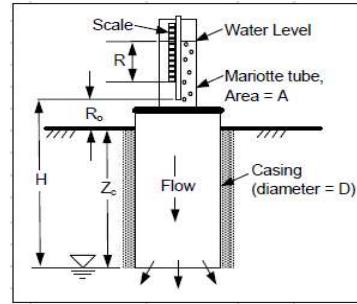
Time (Date, H:M)	R (cm)	T (°C)	Comments	Q (mL/s)	Elapsed Time (d)	R _t (-)	K (cm/s)	Percent Change (%)
2022-07-22 11:21	2		START					
2022-07-23 9:40	2.3			-8.22E-06	0.930	1.000	2.85E-09	
2022-07-24 9:45	1.4		AFFECTED BY RAIN. OMIT					
2022-07-25 8:42	8.8			-5.73E-05	2.890	1.000	1.98E-08	-11%
2022-07-26 8:46	13.8			-3.27E-05	3.892	1.000	1.13E-08	3%
2022-07-27 11:11	24.2			-5.30E-05	4.993	1.000	1.84E-08	-3%
2022-07-28 8:10	18.1		AFFECTED BY RAIN. CONSIDERED A RESTART TO CONFIRM K					
2022-07-29 8:05	22.2			-1.05E-04	0.997	1.000	3.63E-08	
2022-07-30 8:30	32.7			-1.33E-04	2.014	1.000	4.60E-08	-1%
2022-07-31 8:00	37.9			-4.42E-05	2.993	1.000	1.53E-08	6%
						GEOMEAN	2.95E-08	cm/s
							2.95E-10	m/s



**Borehole Hydraulic Conductivity Test
ASTM D 6391 Method C**



Project:	1003-223
Date:	23-Jul-22
Test ID:	BP30
Installer:	BW
Analyst:	TBD



Fixed Variables:

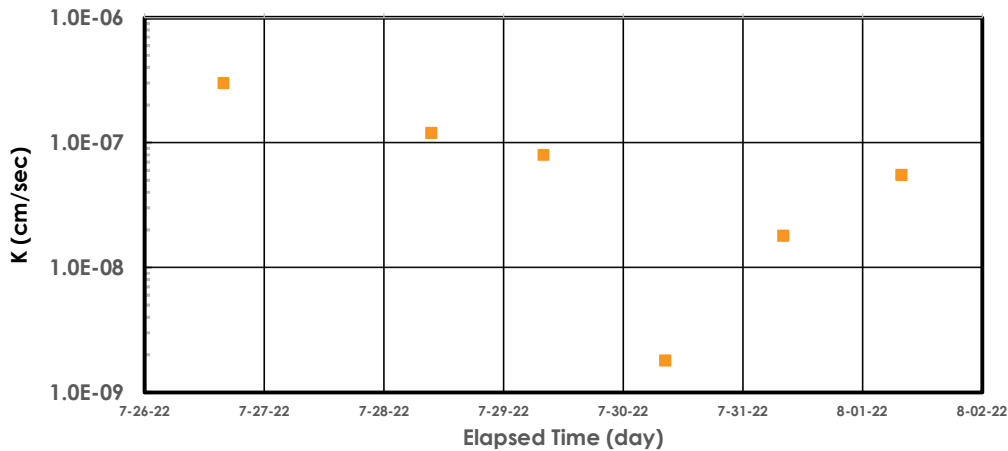
Casing Diameter, D	cm	30
Standpipe Inner Diameter, D	cm	6.8
Mariotte Outer Diameter, D	cm	1
Standpipe Inner Area	cm ²	2.2 (Inner Tube Test)
Bubble Pt Elevation, R _o	cm	14.5
Casing Embedment, Z _c	cm	20.5
TEG (yes/no)	yes/no	no

35.2

Temporal Field Data:

Computations:

Time (Date, H:M)	R (cm)	T (°C)	Comments	Q (ml/s)	Elapsed Time (d)	R _t (-)	K (cm/s)	Percent Change (%)
2022-07-26 15:48	1		START					
2022-07-27 11:06	28.4			-8.68E-04	0.804	1.000	3.00E-07	
2022-07-27 11:07	3.1		Refilled					
2022-07-28 9:30	4.8		FELL OVER (RESTARTED)					
2022-07-29 8:00	17.5			-3.45E-04	0.938	1.000	1.19E-07	
2022-07-30 8:25	35.2		DROP IN OUTER NOTED	-2.31E-04	1.955	1.000	7.98E-08	2%
2022-07-31 8:05	35.8		DROP IN OUTER NOTED	-5.19E-06	2.941	1.000	1.80E-09	19%
2022-07-31 8:05	7.9		SWITCHED TO COMBINED					
2022-08-01 7:45	8.4		RAIN DURING PERIOD	-5.19E-05	3.927	1.000	1.80E-08	
2022-08-02 0:00	10.2			-1.59E-04	4.604	1.000	5.52E-08	-7%
						GEOMEAN	3.15E-08	cm/s
							3.15E-10	m/s



Borehole Permeameter Area Results

EMRS22_BP_P30_L2_B29_220721

Moisture Content	
Sample I.D.	Lab MC
FIELD MC	40.5
EMRS22_MC_P30_L1_S512	29.1

Nuclear Density	
Sample I.D.	Dry Density (Corrected If Possible)
EMRS22_DE_P30_L2_D478	1341.0
EMRS22_DE_P30_L1_D461	1470.0

Sample ID	Sample Date	Test Date	Trial #	Moisture Content (%)	/100	Dry Density	Opt. DD (kg/m ³)	Opt. MC (%)
EMRS22_PR_P30_L1_S514_220525	2022-05-25	2022-05-29	1	14	0.14	1560	1599	20.6
			2	17.5	0.175	1589		
			3	20.5	0.205	1599		
			4	26.8	0.268	1515		
			5	28.3	0.283	1462		

Sample ID	Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
EMRS22_AT_P30_L2_S523	41	15	26
EMRS22_AT_P30_L1_S514	43	15	28

Sample ID	Fractional Components									
Cobbles	Gravel			Sand			Fines			
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	1.7	1.7	1.2	2.9	15.2	19.3	31.9	47.1	79.0

Sample ID	Fractional Components									
Cobbles	Gravel			Sand			Fines			
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	2.2	2.2	1.3	2.9	13.0	17.2	27.8	52.8	80.6

Hydraulic Conductivity

Hydraulic conductivity results inconclusive due to the influence of rainfall during testing period. Further testing required during following construction season.

EMRS22_BP_P30_L2_B30_220721

Moisture Content	
Sample I.D.	Lab MC
EMRS22_MC_P30_L2_S540	26.6
Field MC	22.5

Nuclear Density	
Sample I.D.	Dry Density (Corrected If Possible)
EMRS22_DE_P30_L2_D488	1550.0
EMRS22_DE_P30_L1_D469	1602.0

Sample ID	Sample Date	Test Date	Trial #	Moisture Content (%)	/100	Dry Density	Opt. DD (kg/m ³)	Opt. MC (%)
EMRS22_PR_P30_L1_S514_220525	2022-05-25	2022-05-29	1	14	0.14	1560	1599	20.6
			2	17.5	0.175	1589		
			3	20.5	0.205	1599		
			4	26.8	0.268	1515		
			5	28.3	0.283	1462		

Sample ID	Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
EMRS22_AT_P30_L2_S532	41	15	26
EMRS22_AT_P30_L1_S521	53	19	34

Sample ID	Fractional Components									
Cobbles	Gravel			Sand			Fines			
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	1.5	1.5	1.5	3.1	15.0	19.6	24.8	54.1	78.9

Sample ID	Fractional Components									
Cobbles	Gravel			Sand			Fines			
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	1.4	1.4	1.2	2.9	15.4	19.5	28.6	50.5	79.1

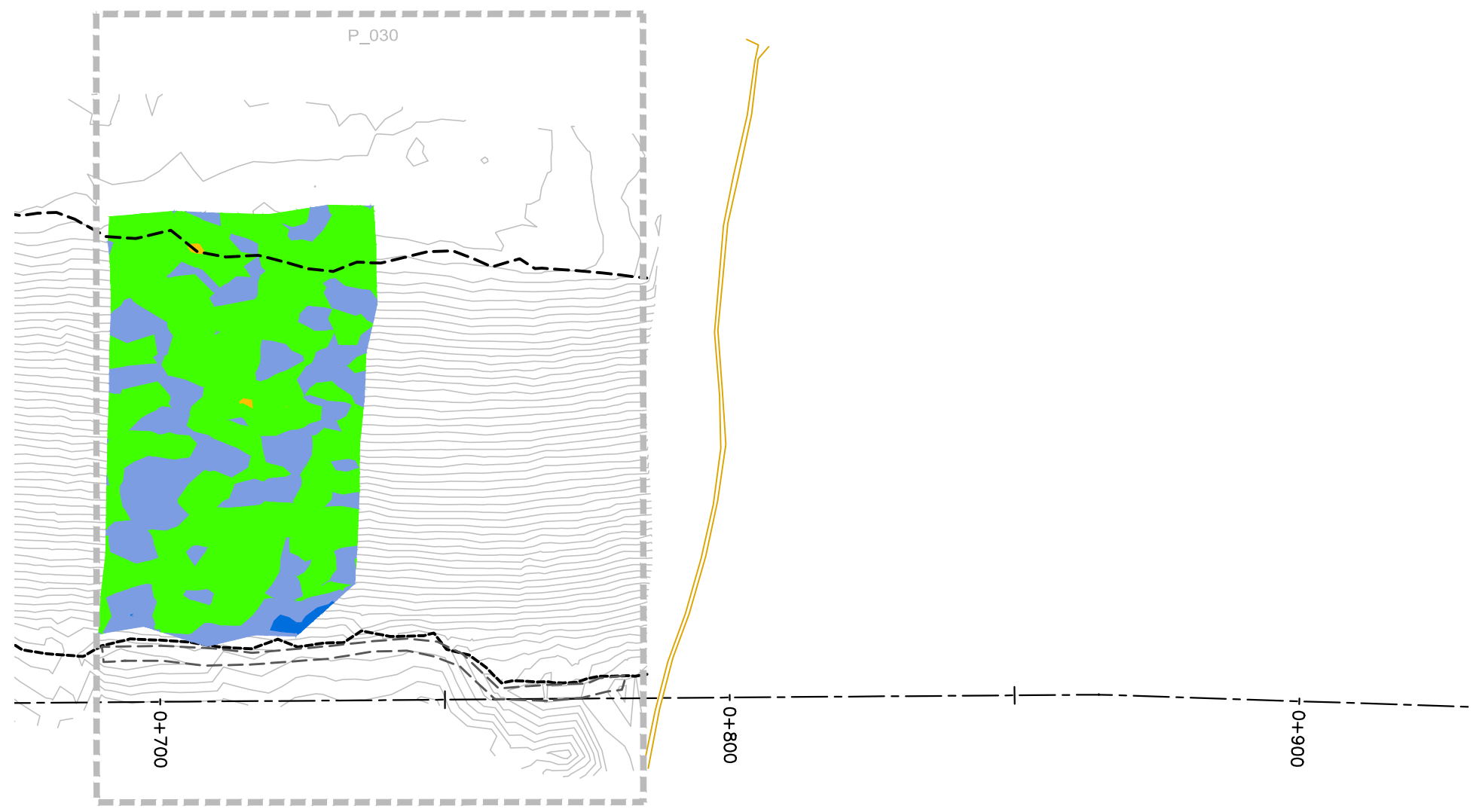
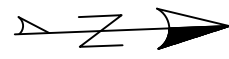
Hydraulic Conductivity

Hydraulic conductivity results inconclusive due to a combination of equipment failure and influence of rainfall during testing period. Further testing required during following construction season.

Appendix C

Tulloch Daily Placement and Heat Maps

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE MAY 26, 2022

DRAWN JTS

CHECKED

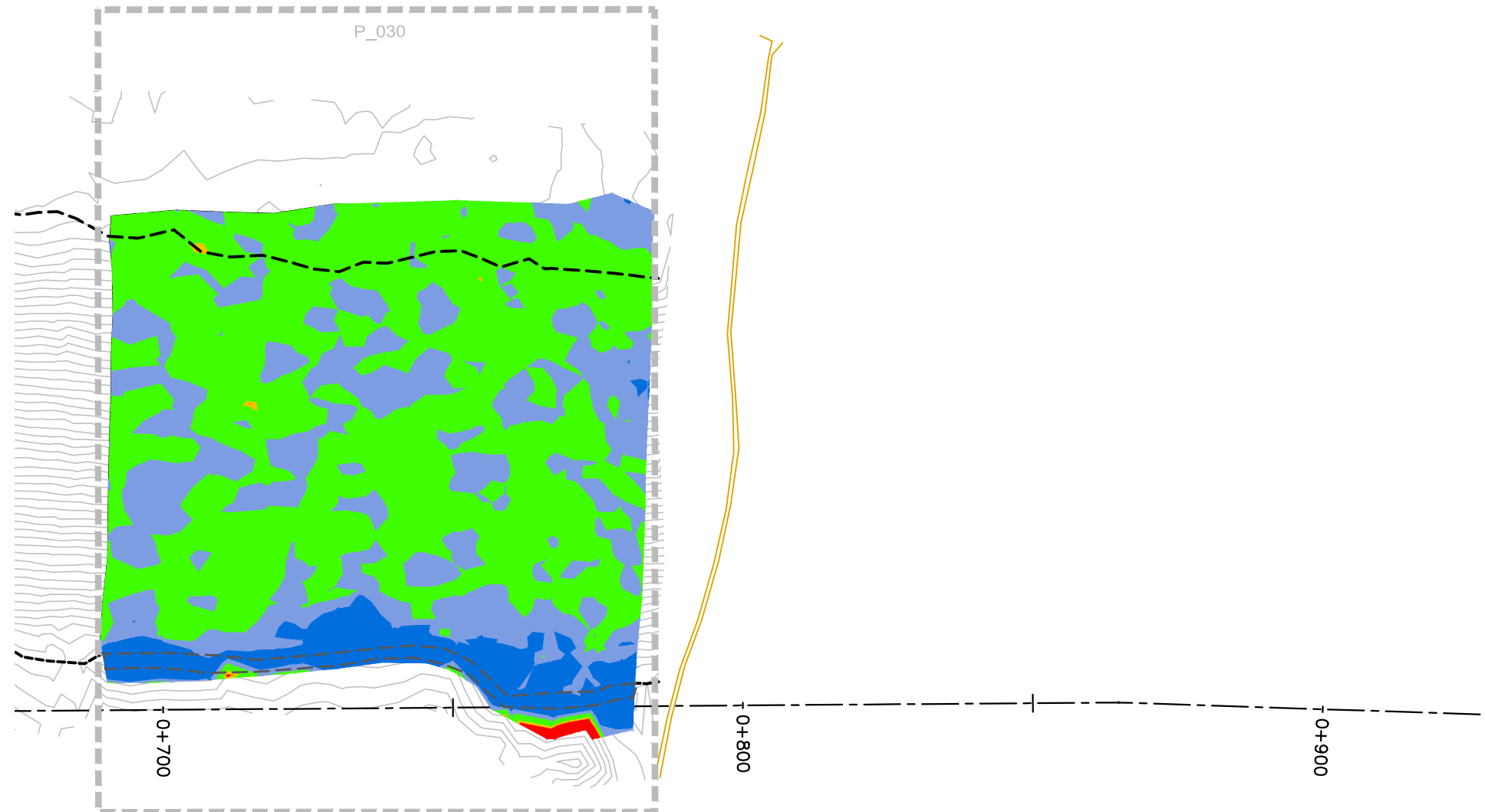
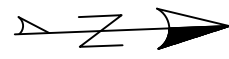
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP

(MAY 26, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE MAY 27, 2022

DRAWN JTS

CHECKED

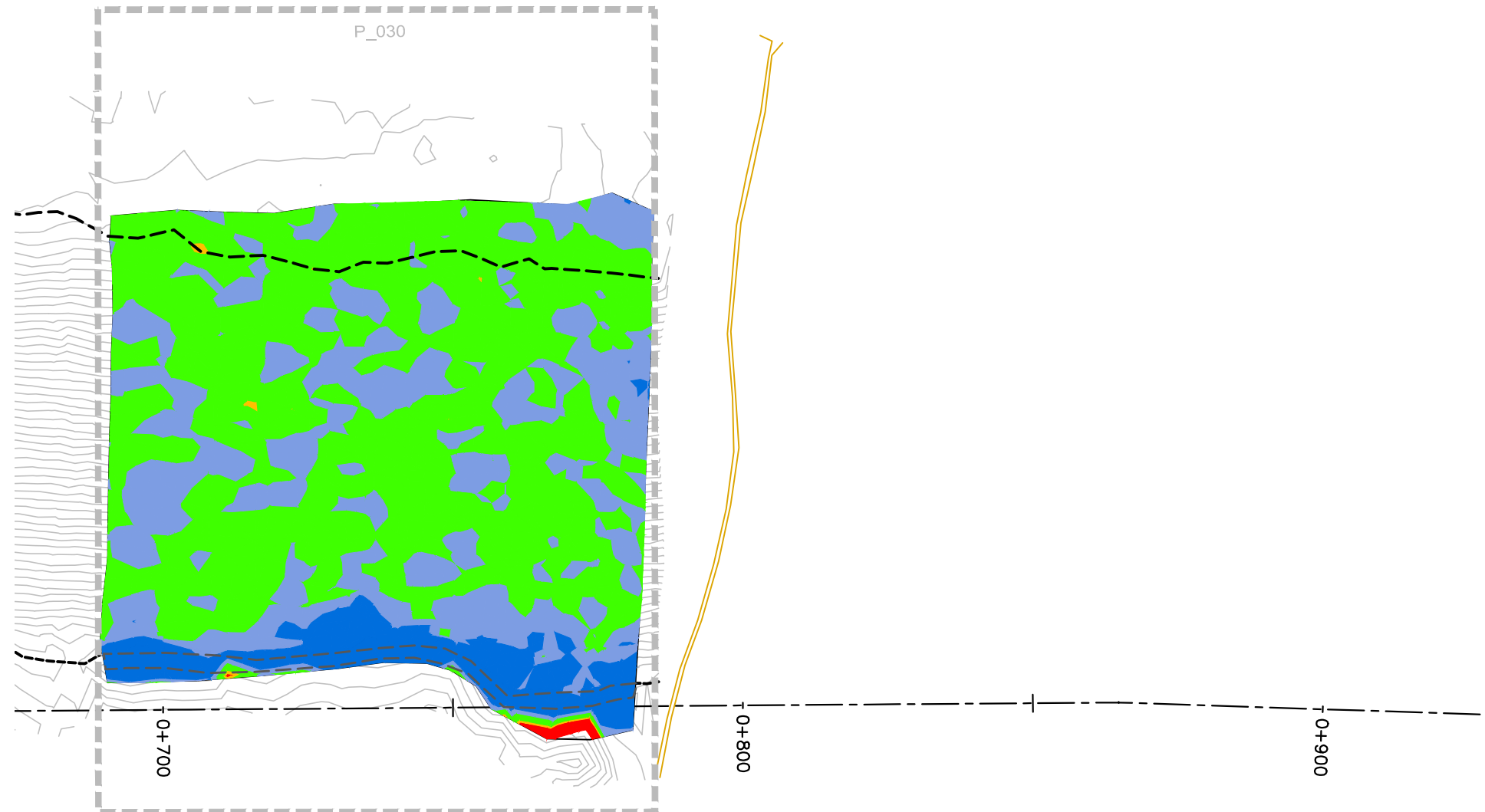
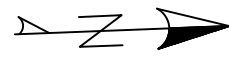
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP

(MAY 27, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE MAY 28, 2022

DRAWN JTS

CHECKED

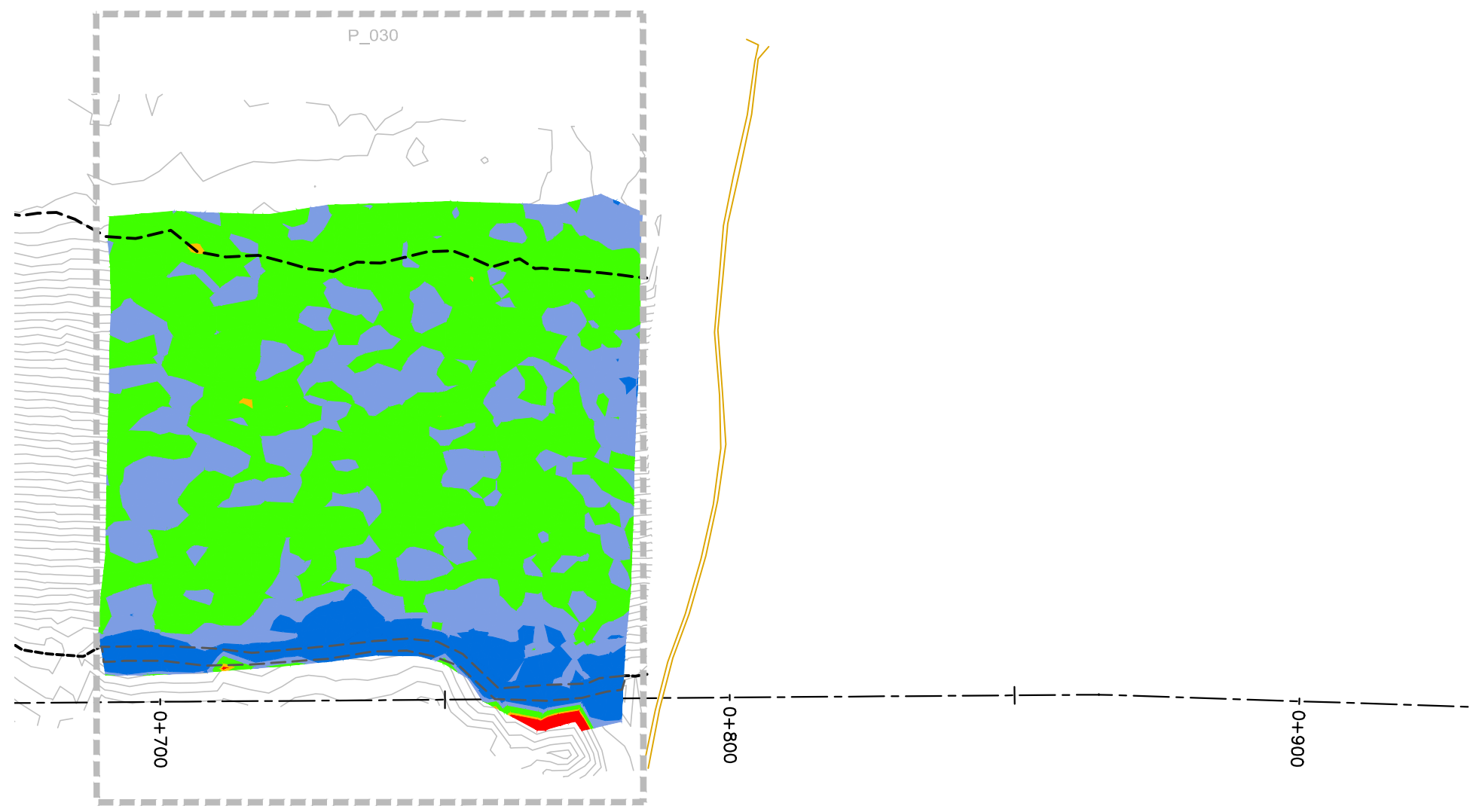
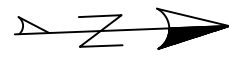
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP

(MAY 28, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	█
0.40m to 0.45m	█
0.45m to 0.60m	█
0.60m to 0.70m	█
> 0.70m	█

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE MAY 29, 2022

DRAWN JTS

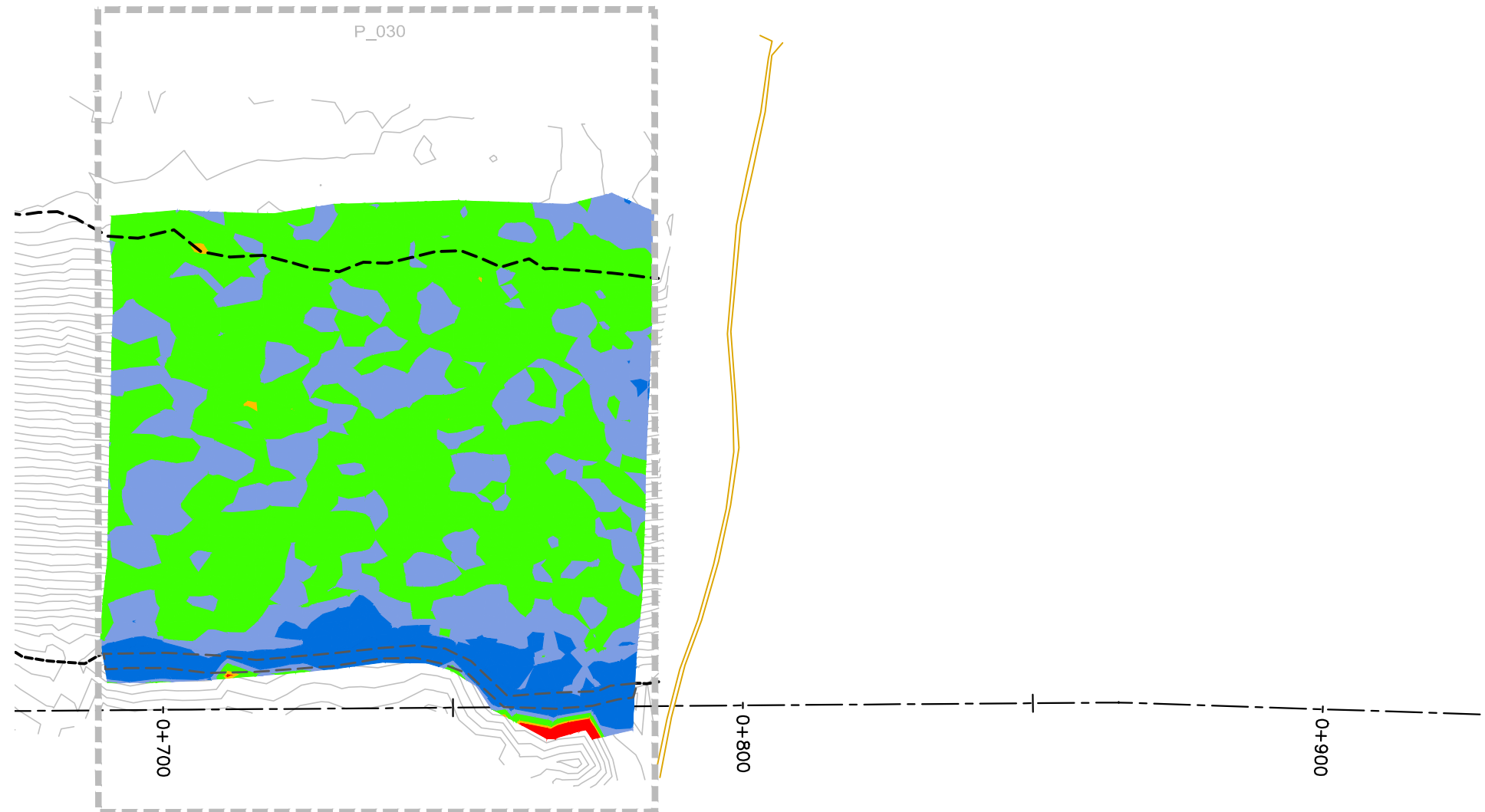
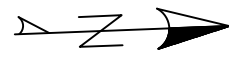
CHECKED

SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(MAY 29, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE MAY 30, 2022

DRAWN JTS

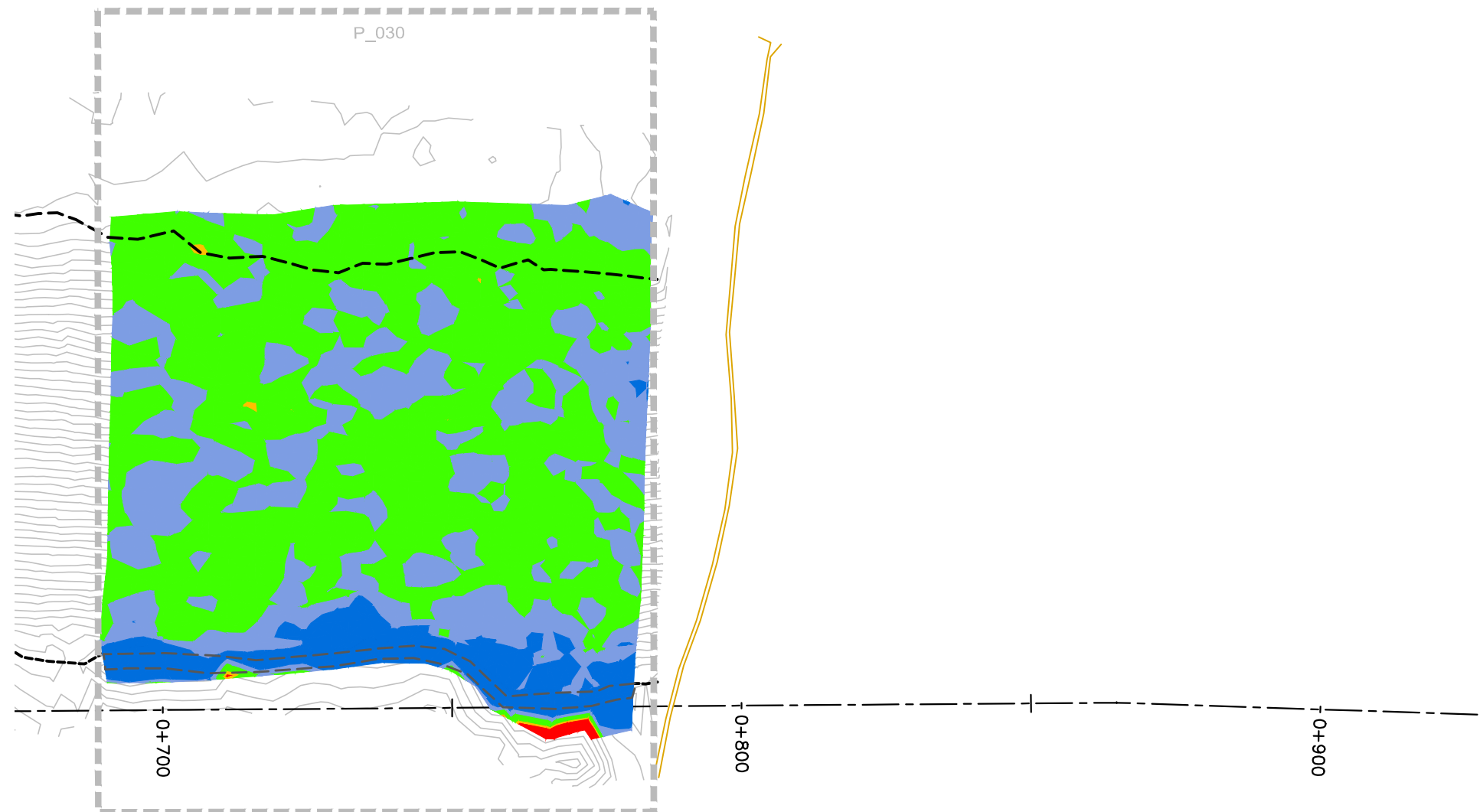
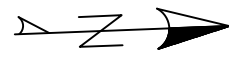
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(MAY 30, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	█
0.40m to 0.45m	█
0.45m to 0.60m	█
0.60m to 0.70m	█
> 0.70m	█

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE MAY 31, 2022

DRAWN JTS

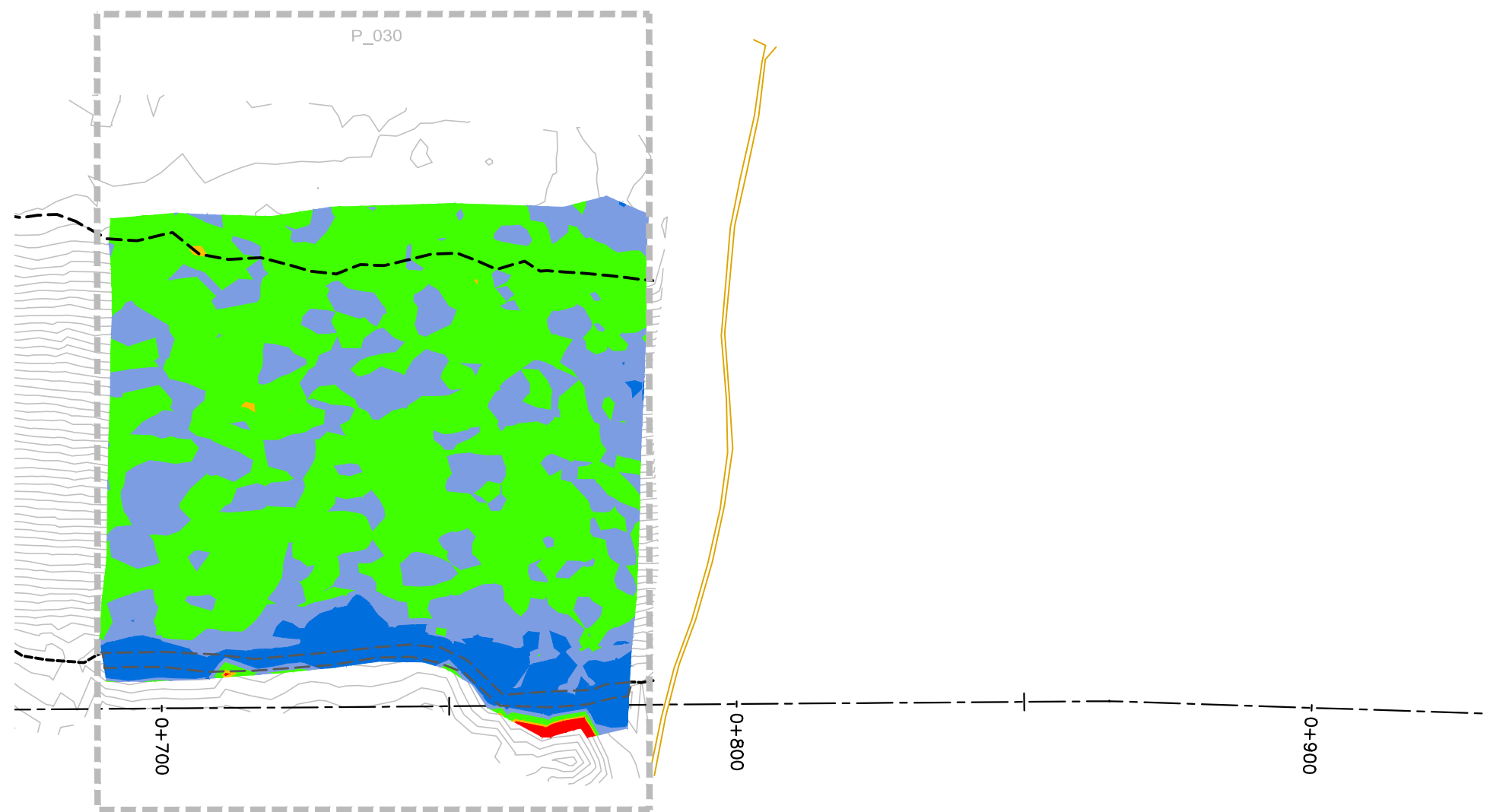
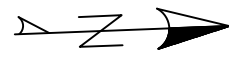
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(MAY 31, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JUNE 1, 2022

DRAWN JTS

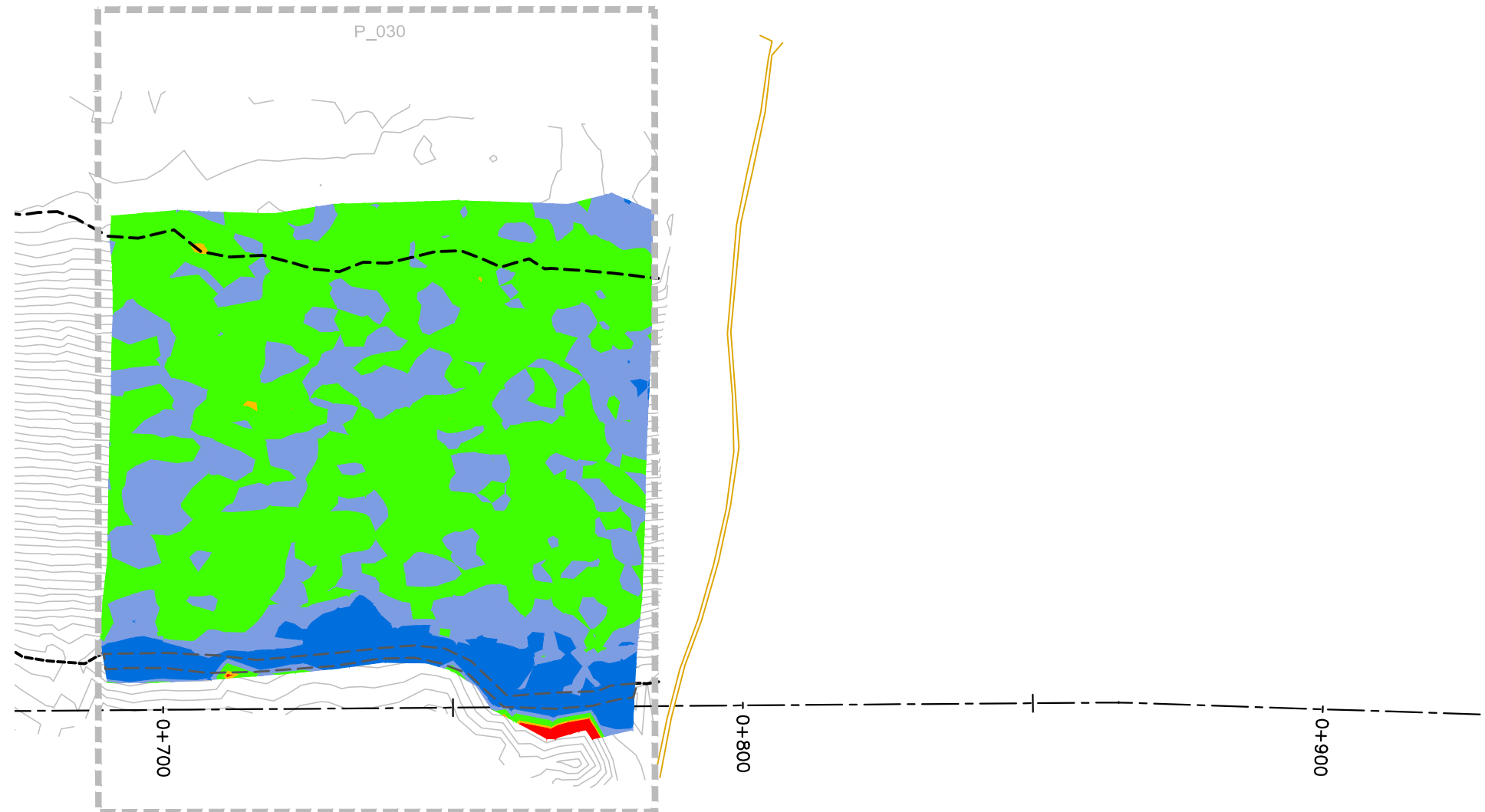
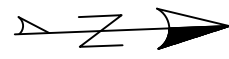
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(JUNE 1, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JUNE 3, 2022

DRAWN JTS

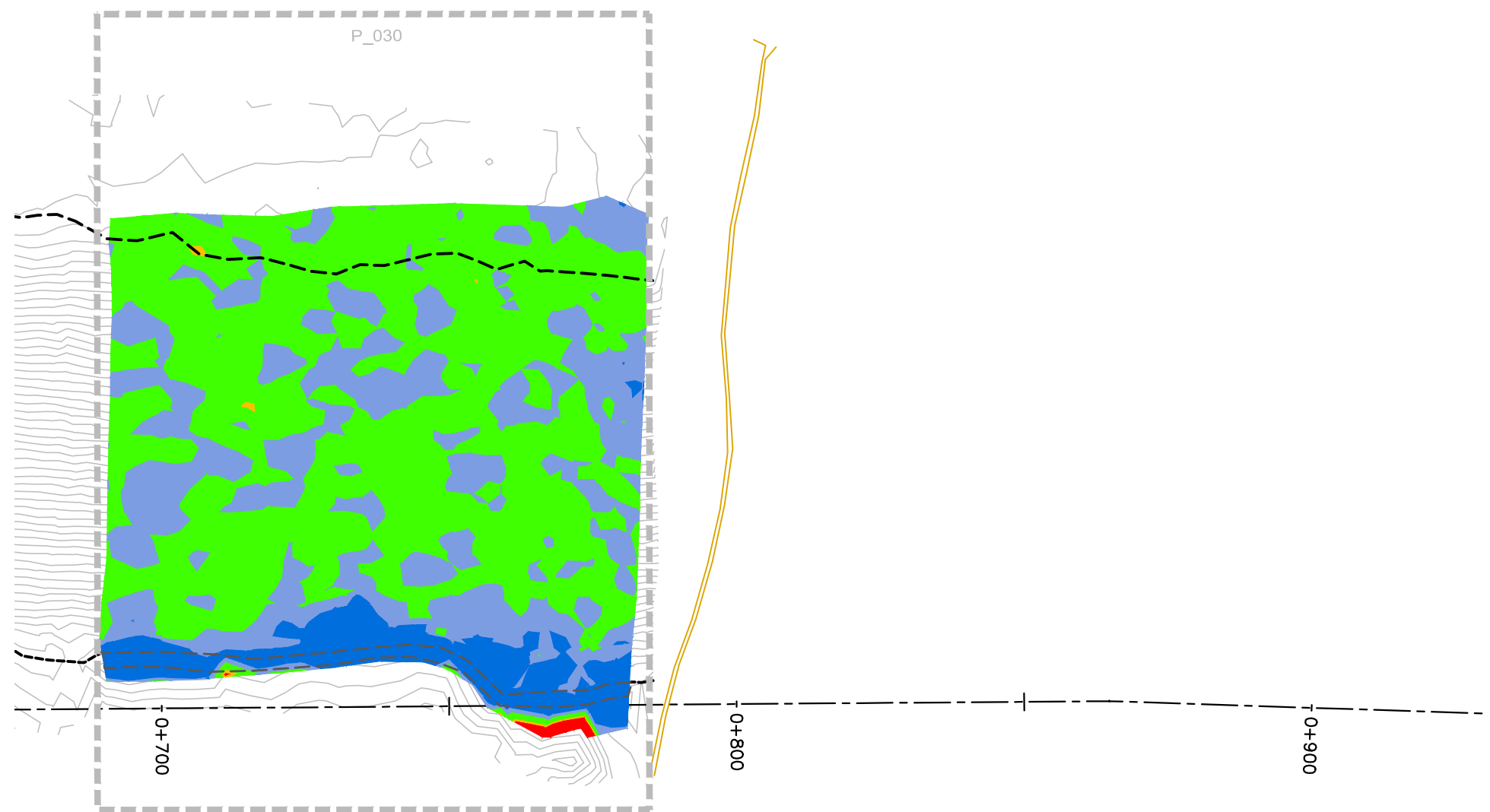
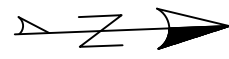
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(JUNE 3, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JUNE 4, 2022

DRAWN JTS

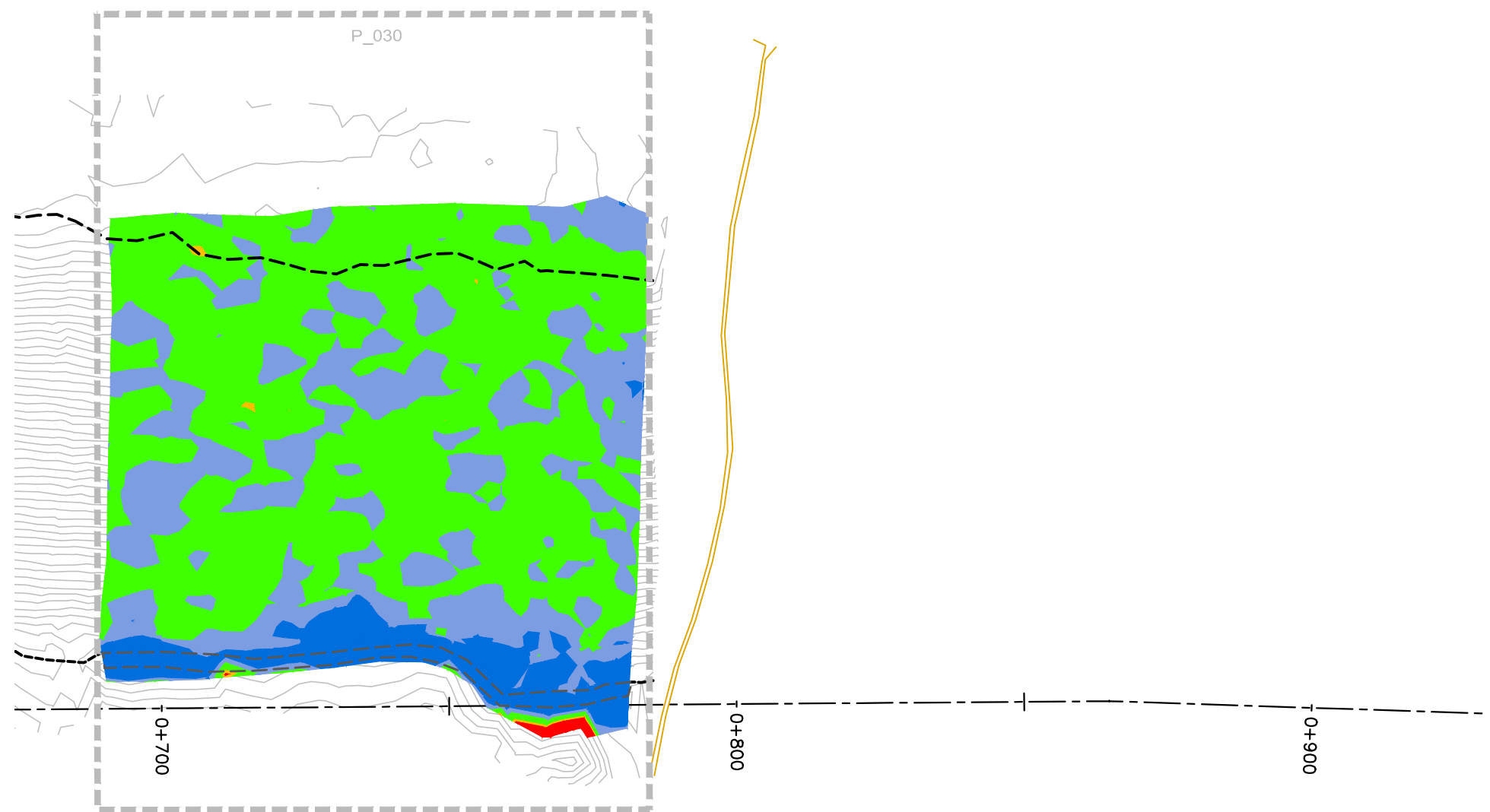
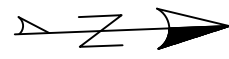
CHECKED

SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(JUNE 4, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JUNE 5, 2022

DRAWN JTS

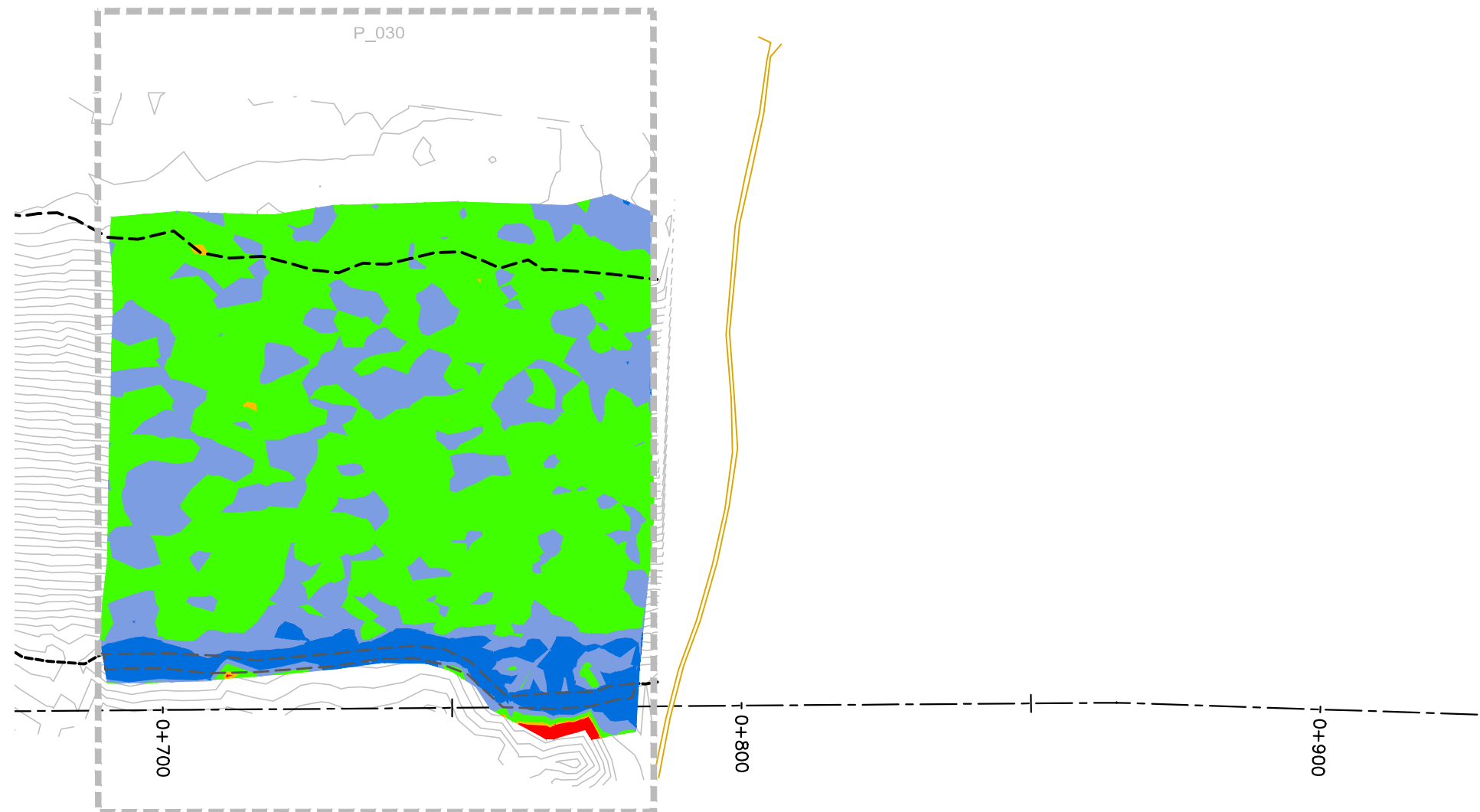
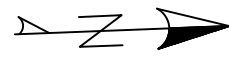
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(JUNE 5, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 4, 2022

DRAWN JTS

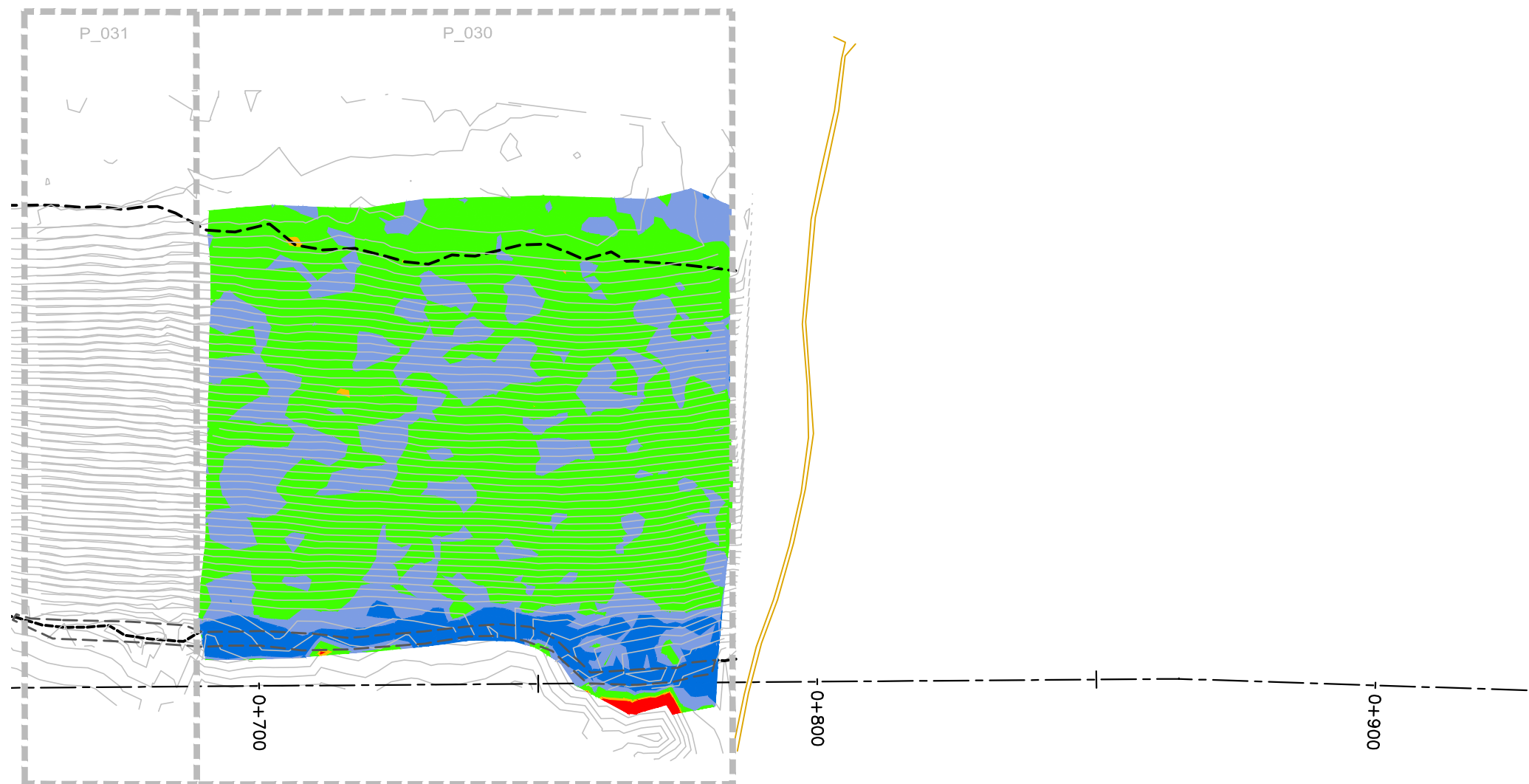
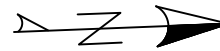
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(JULY 4, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	█
0.40m to 0.45m	█
0.45m to 0.60m	█
0.60m to 0.70m	█
> 0.70m	█

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 5, 2022

DRAWN JTS

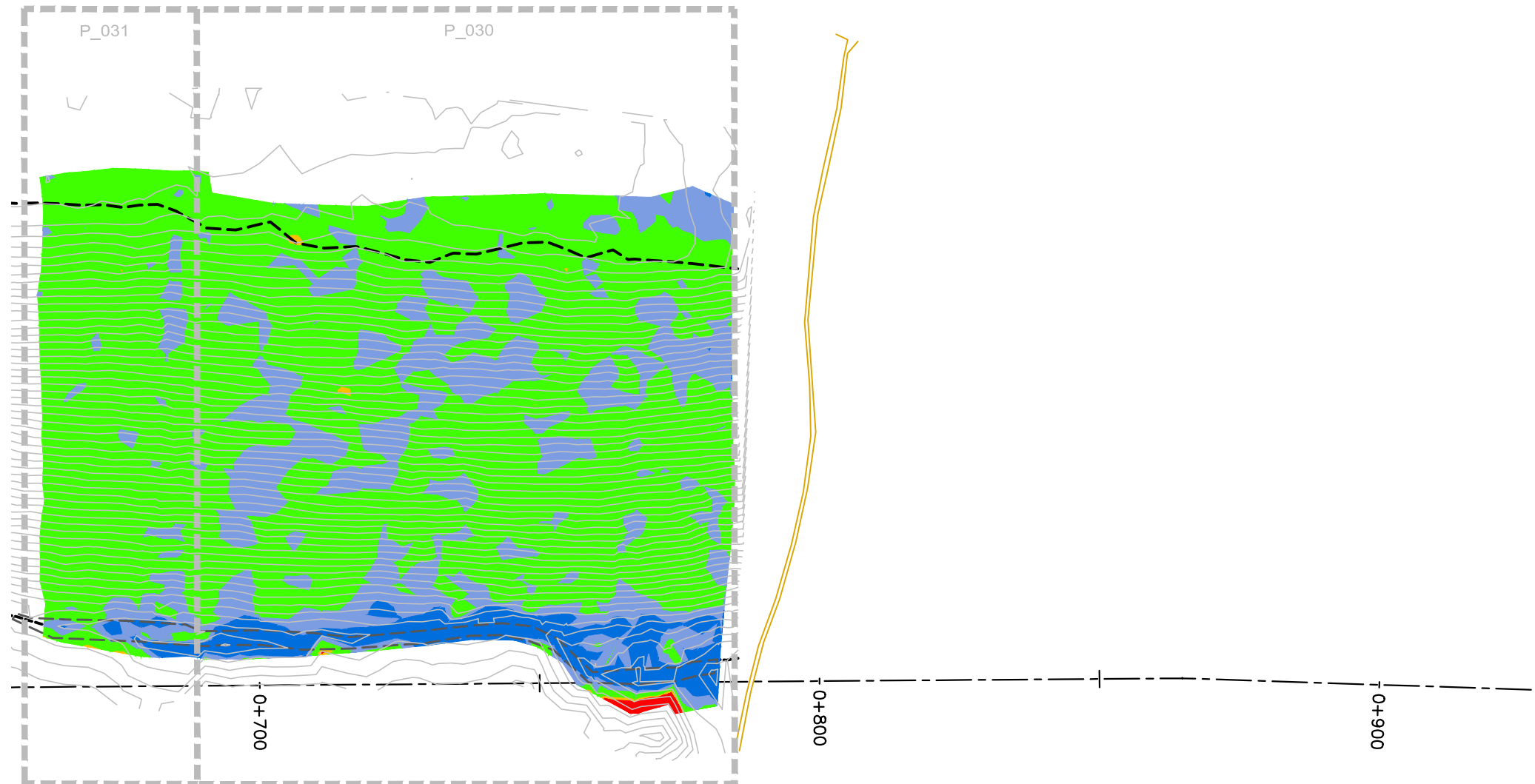
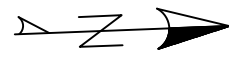
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 5, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 6, 2022

DRAWN JTS

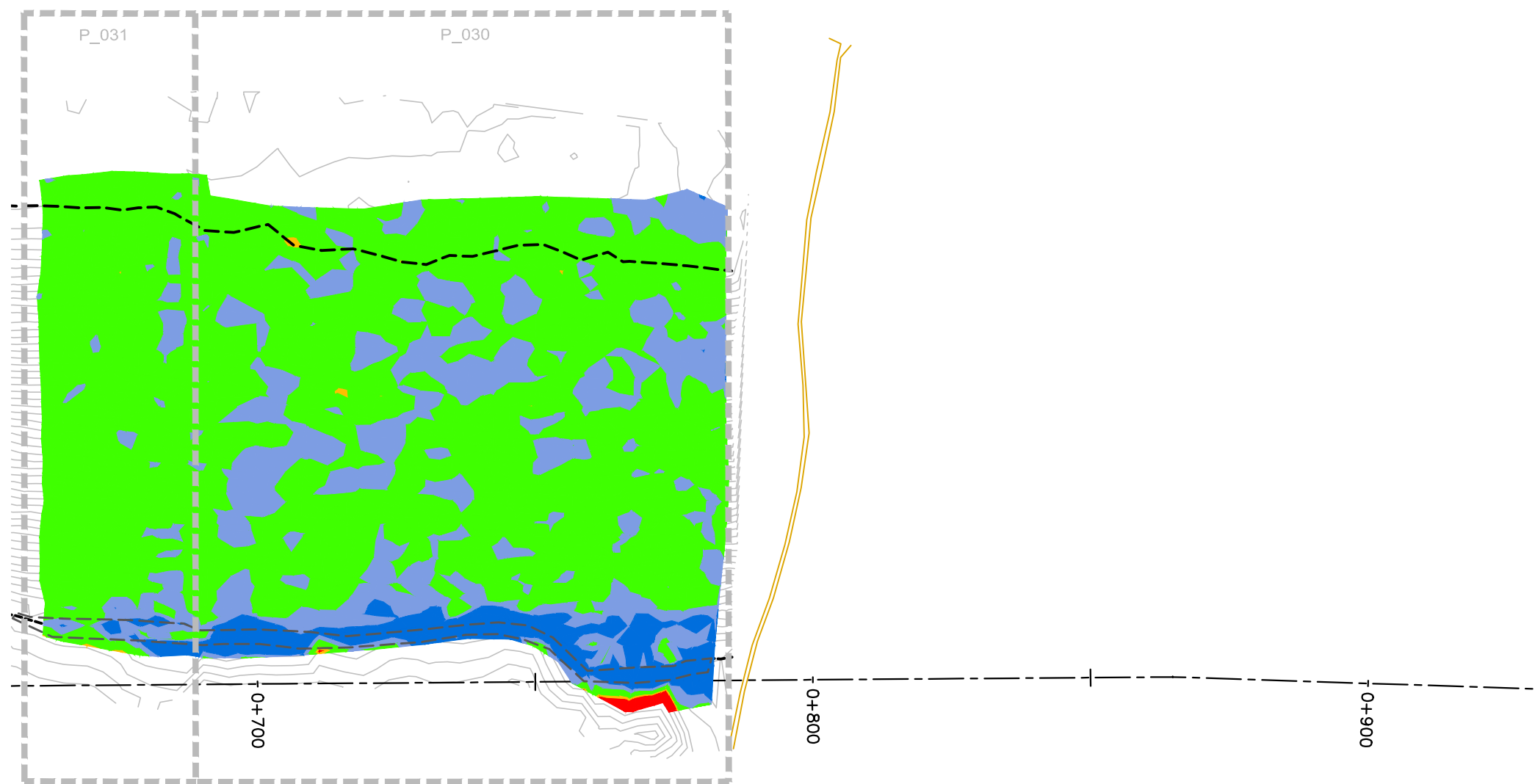
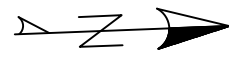
CHECKED

SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(JULY 6, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	█
0.40m to 0.45m	█
0.45m to 0.60m	█
0.60m to 0.70m	█
> 0.70m	█

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 8, 2022

DRAWN JTS

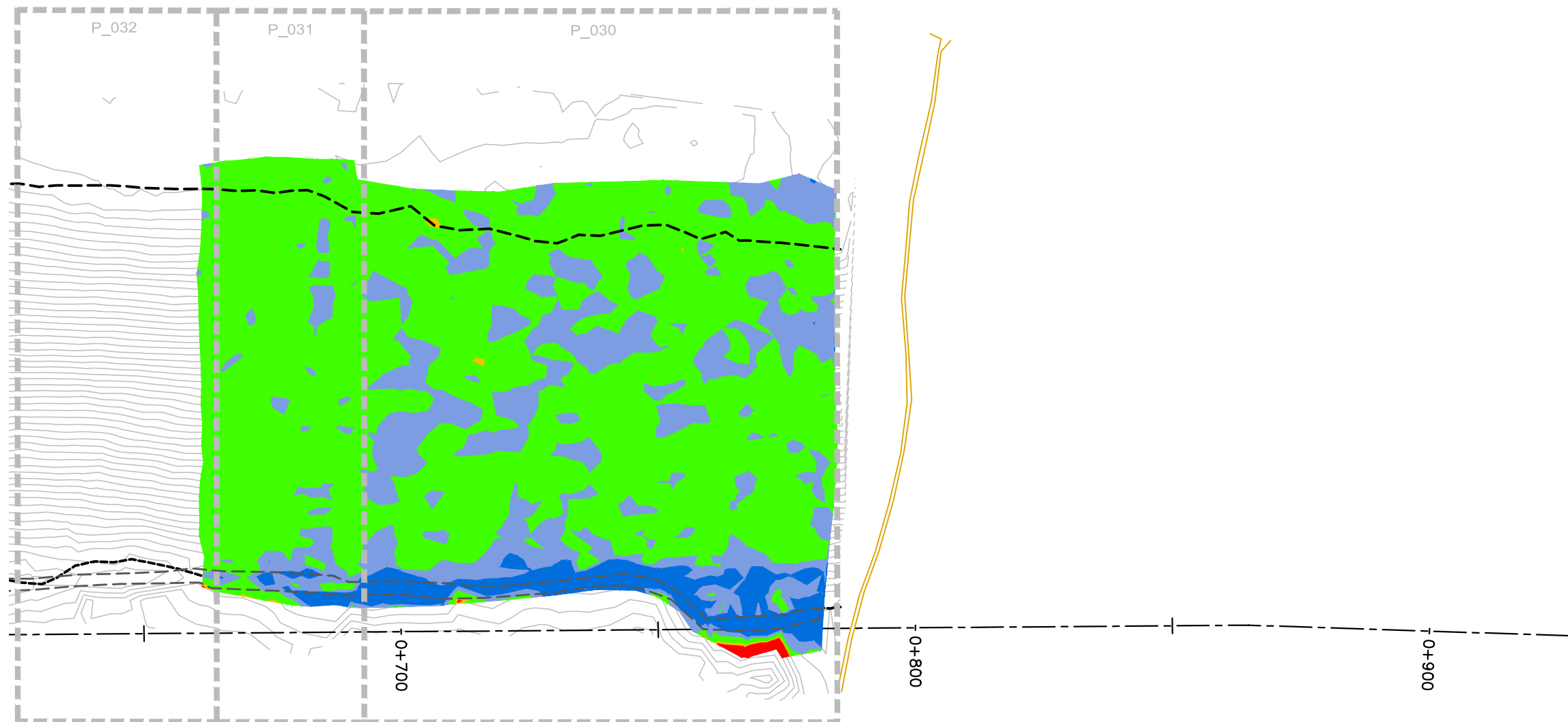
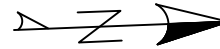
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP
(JULY 8, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 13, 2022

DRAWN JTS

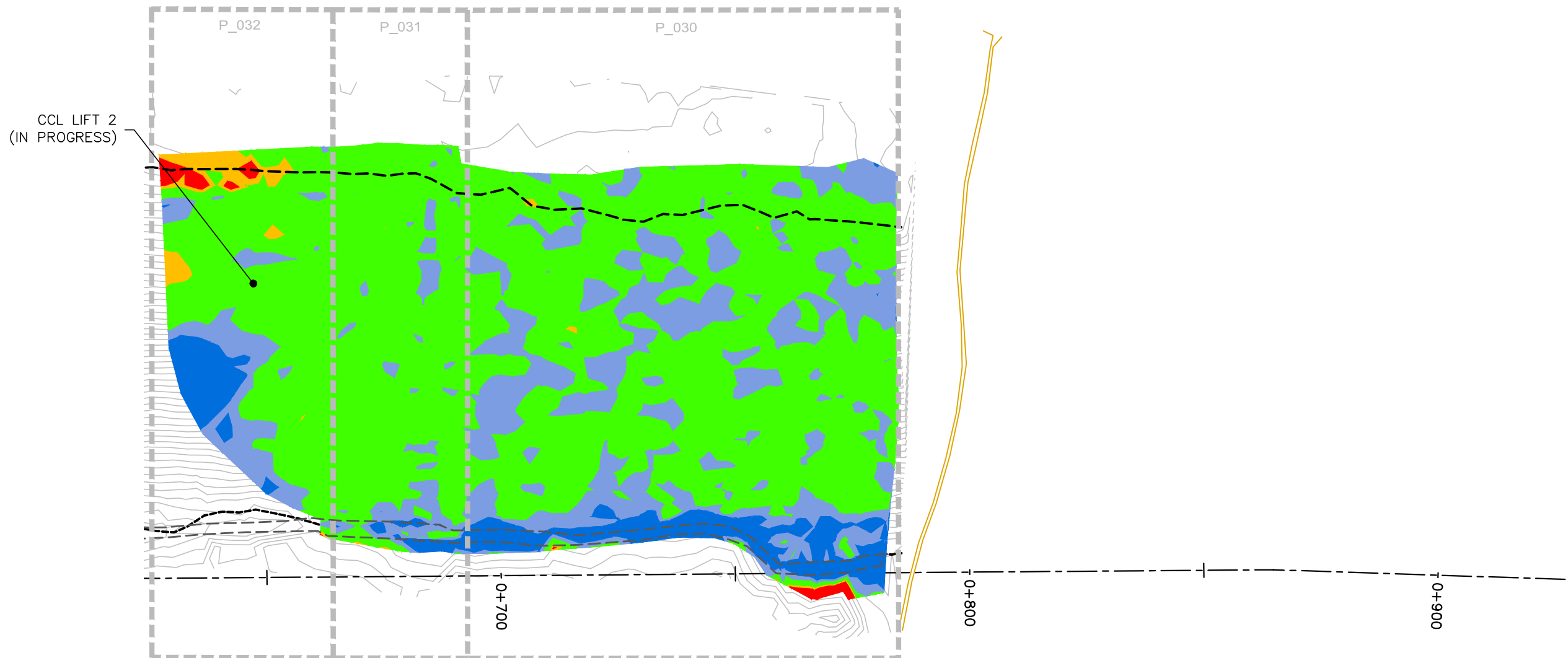
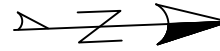
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 13, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 14, 2022

DRAWN JTS

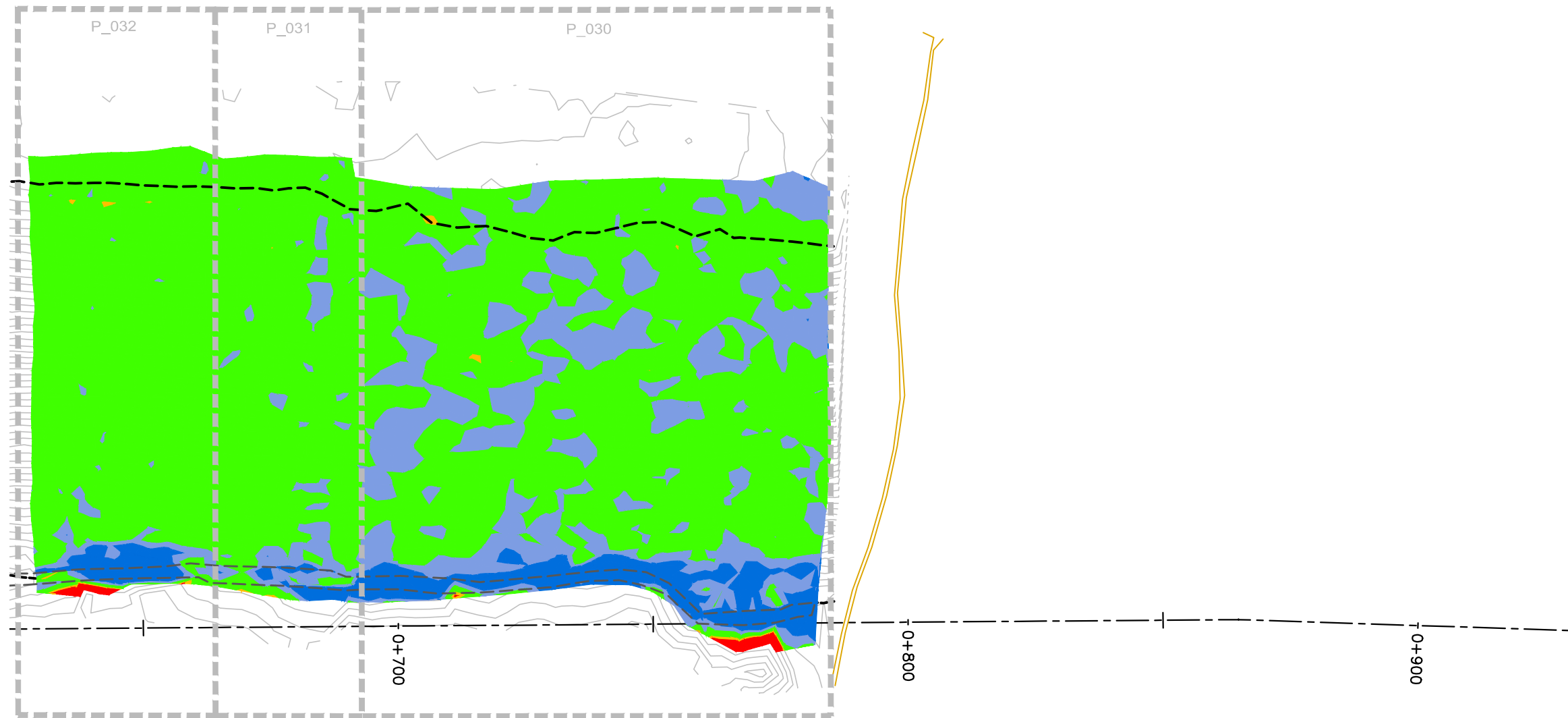
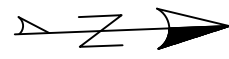
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 14, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 15, 2022

DRAWN JTS

CHECKED

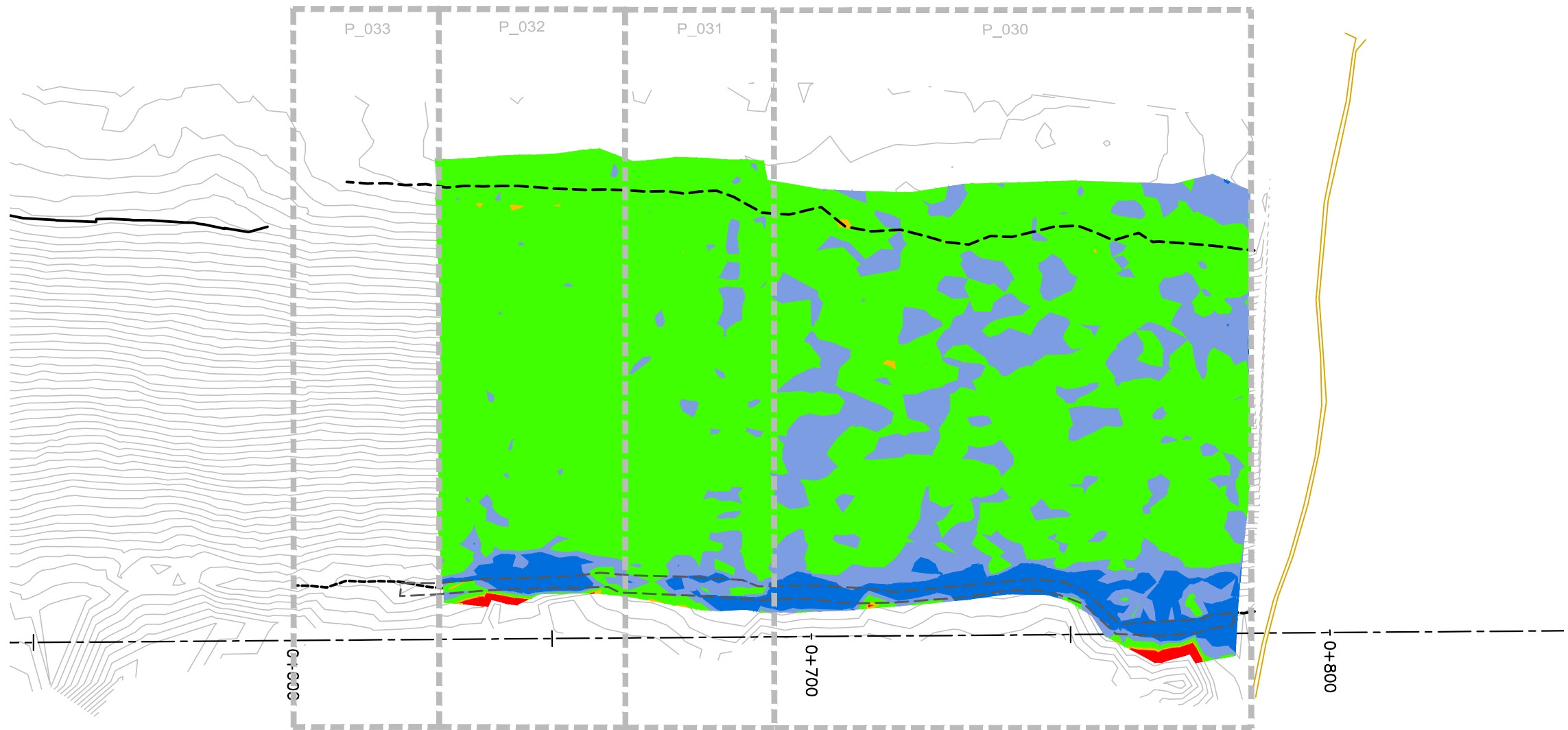
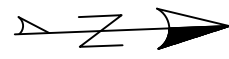
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP

(JULY 15, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 16, 2022

DRAWN JTS

CHECKED

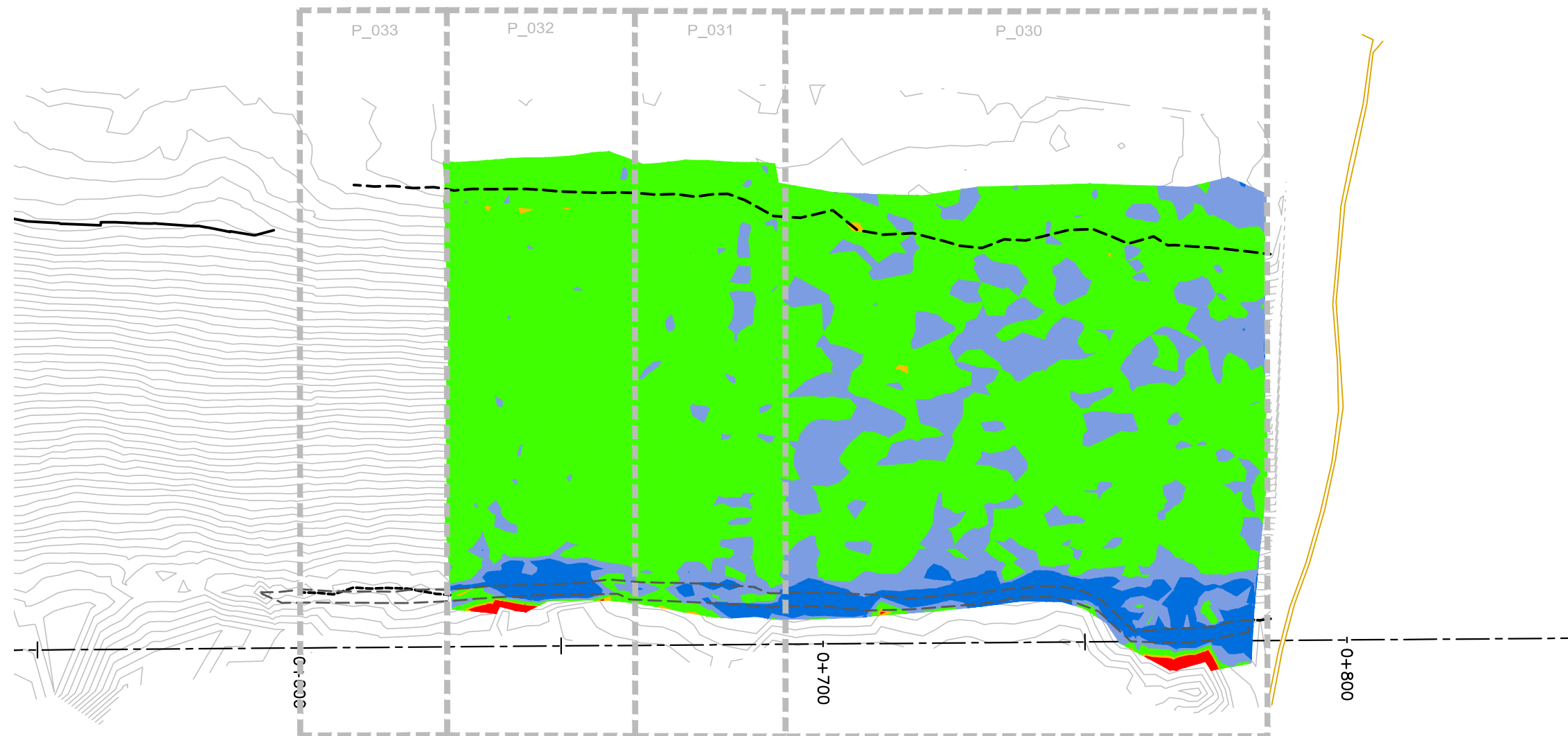
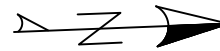
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP

(JULY 16, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 17, 2022

DRAWN JTS

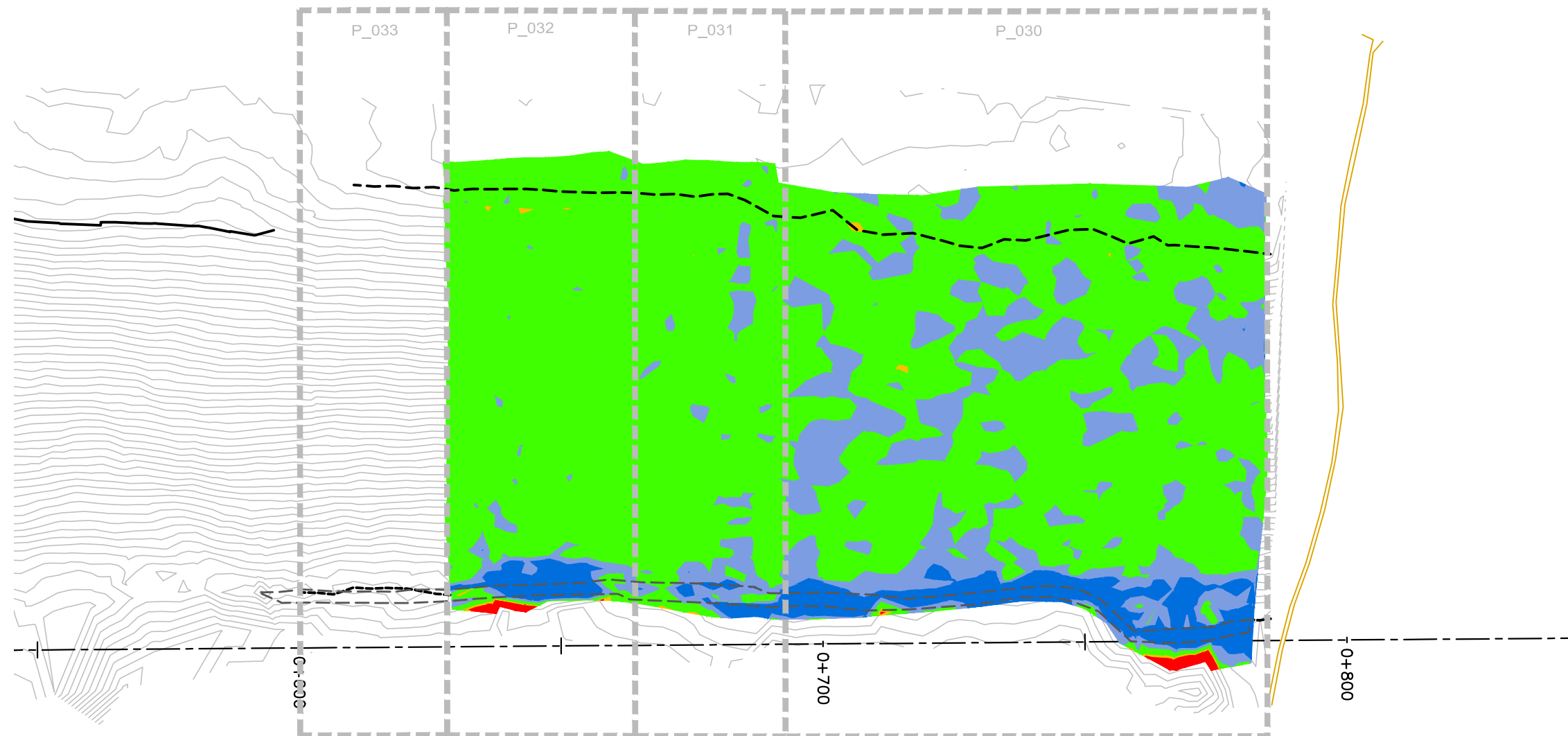
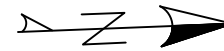
CHECKED

SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 17, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 21, 2022

DRAWN JTS

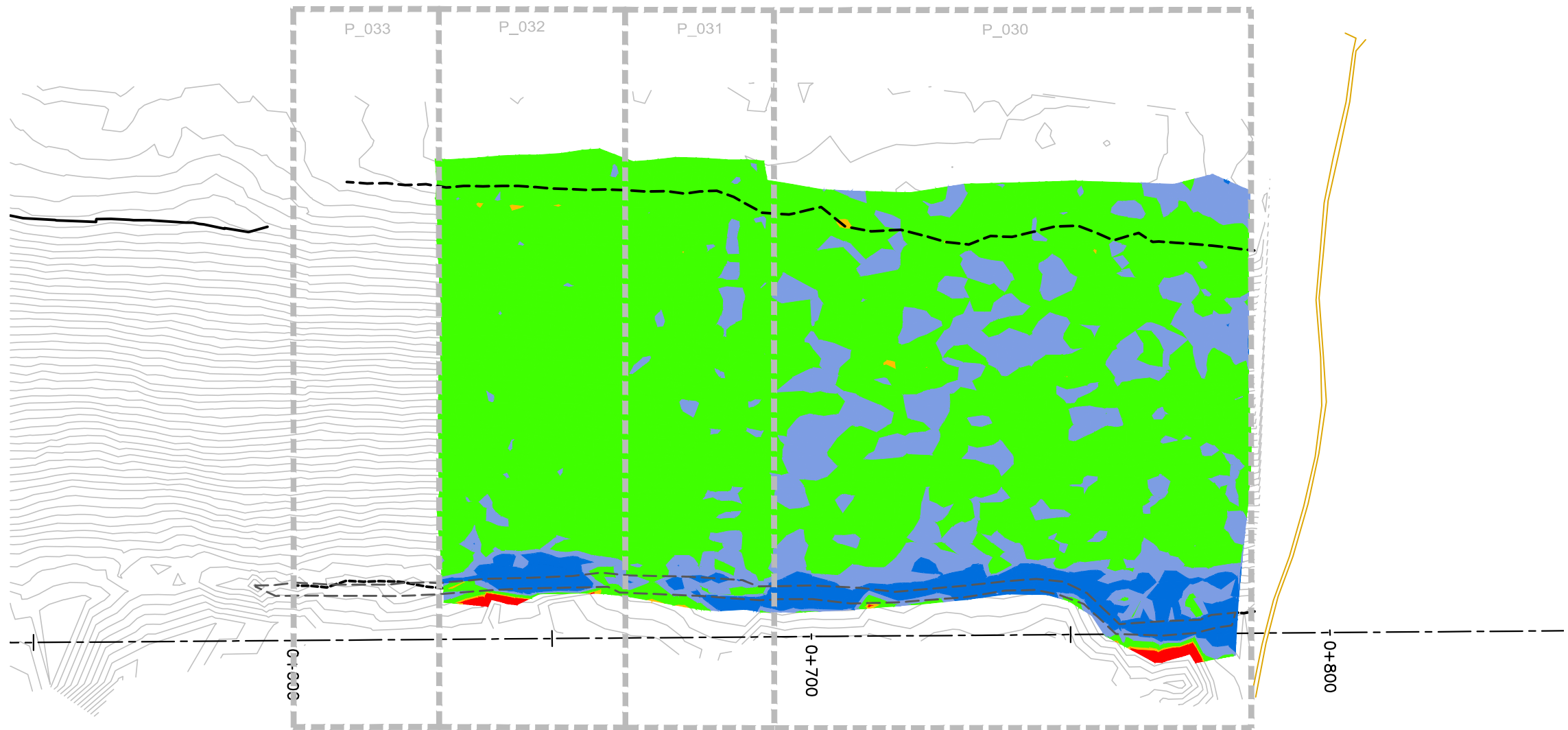
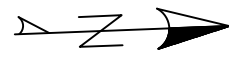
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 21, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 22, 2022

DRAWN JTS

CHECKED

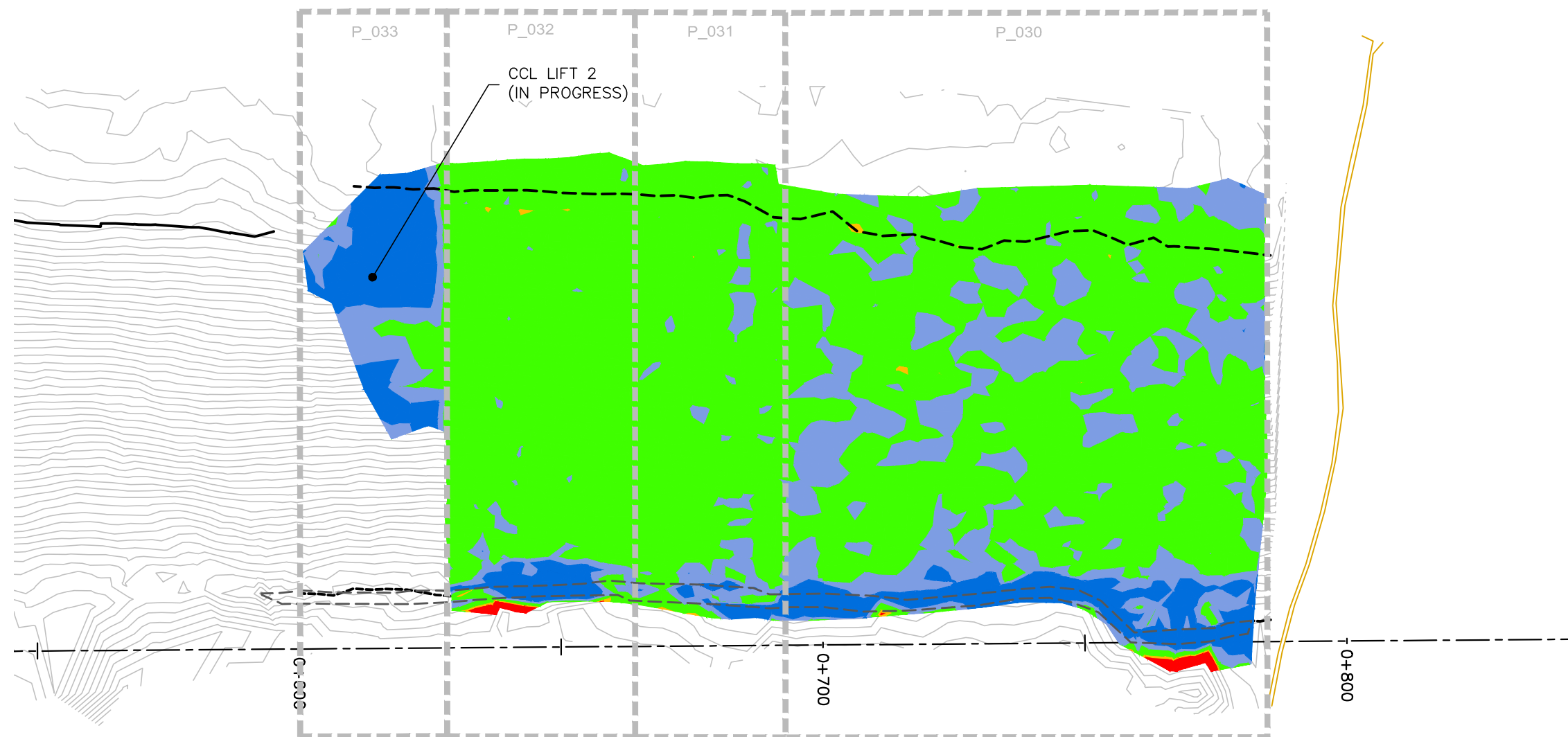
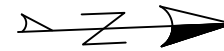
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION — CCL HEAT MAP

(JULY 22, 2022) SCALE: N.T.S.

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	█
0.40m to 0.45m	█
0.45m to 0.60m	█
0.60m to 0.70m	█
> 0.70m	█

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 25, 2022

DRAWN JTS

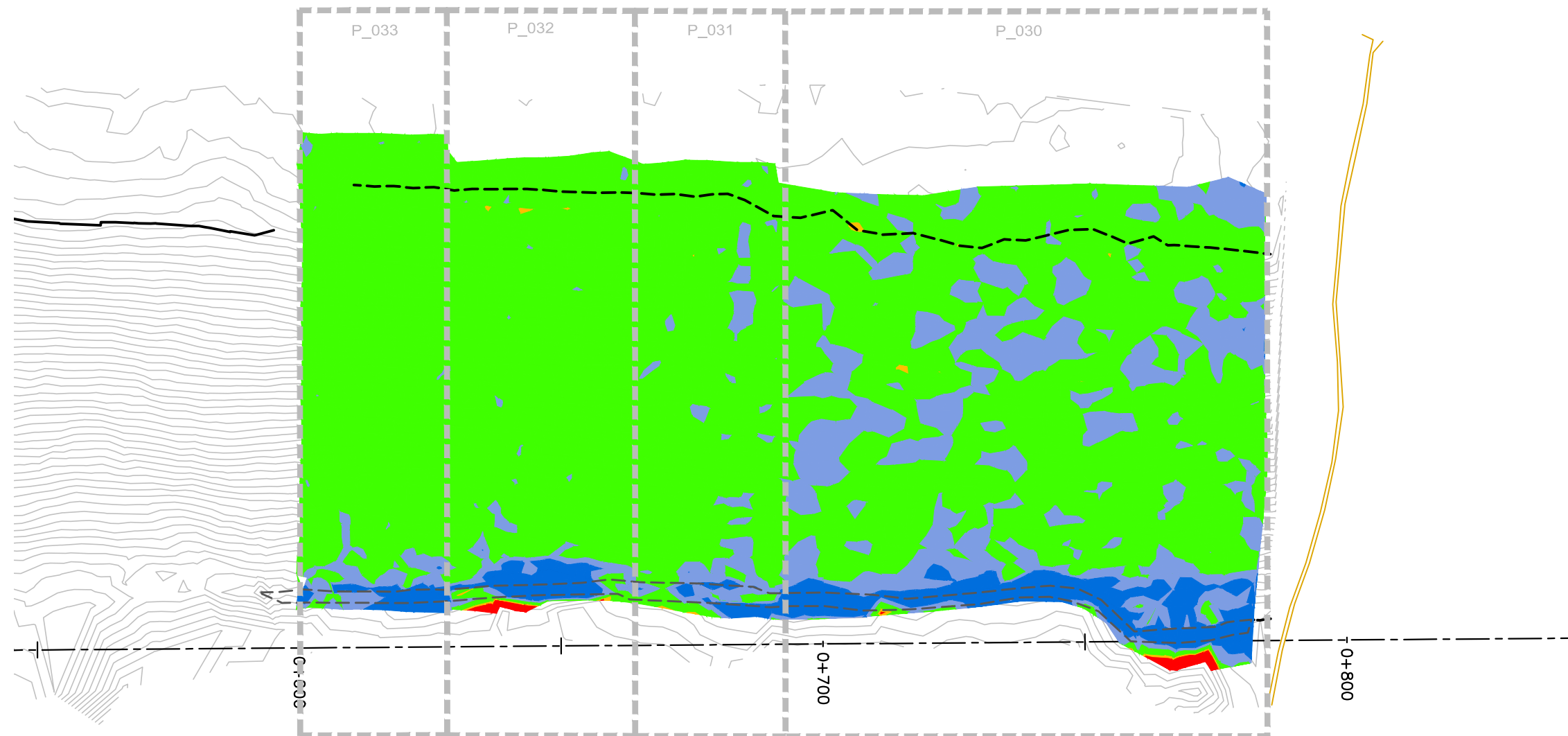
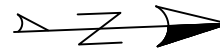
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 25, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 29, 2022

DRAWN JTS

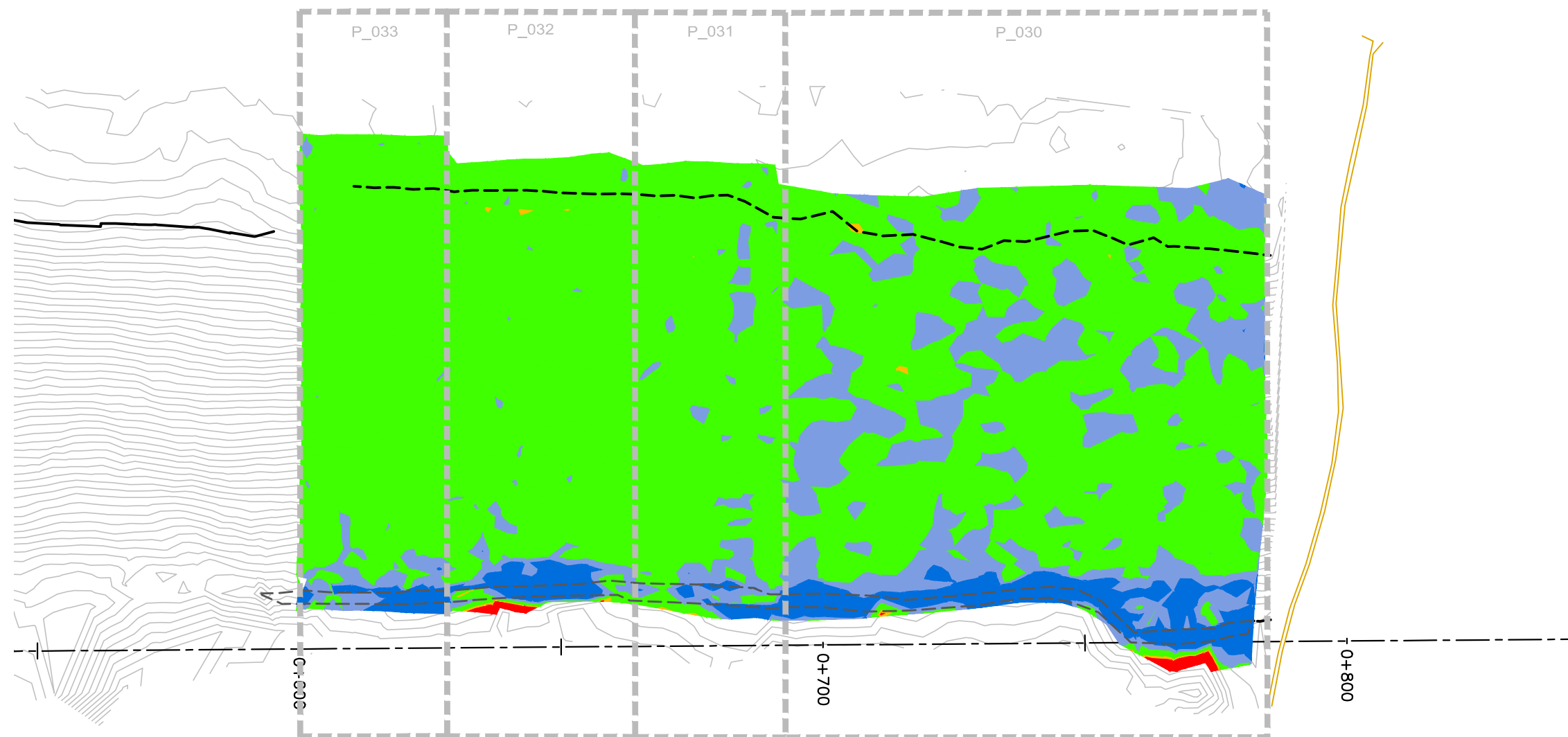
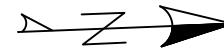
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 29, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	█
0.40m to 0.45m	█
0.45m to 0.60m	█
0.60m to 0.70m	█
> 0.70m	█

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 30, 2022

DRAWN JTS

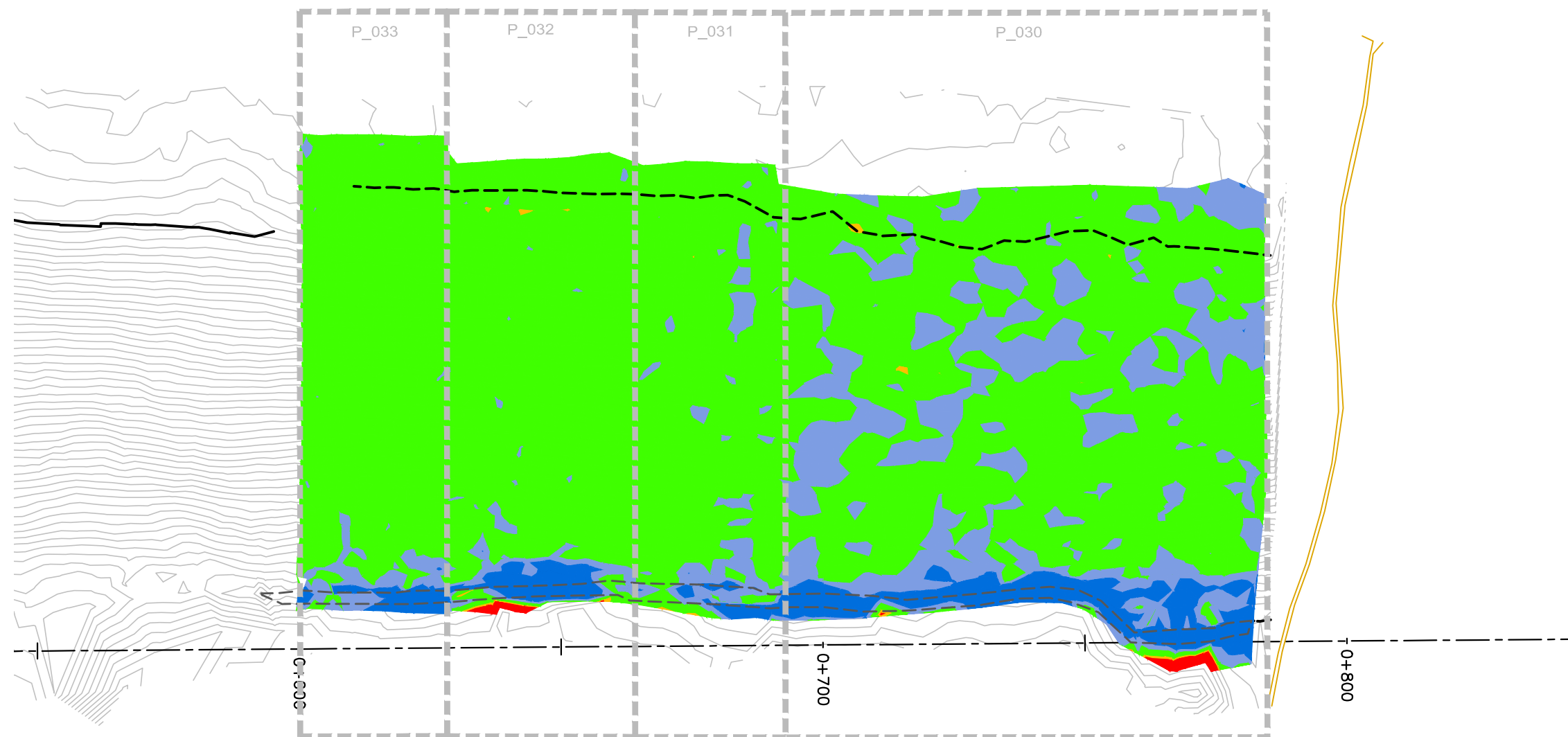
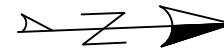
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 30, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE JULY 31, 2022

DRAWN JTS

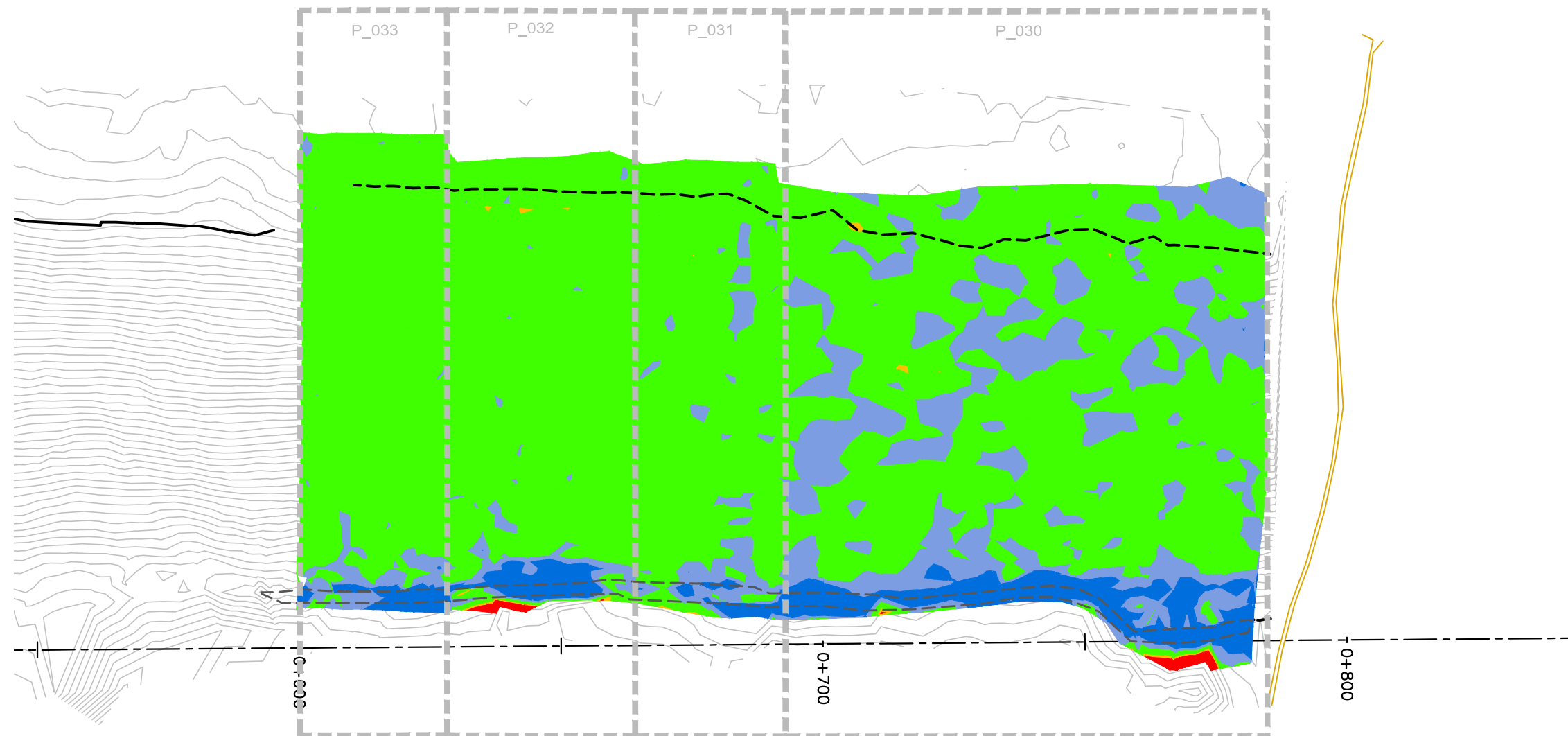
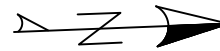
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(JULY 31, 2022 SCALE: N.T.S.)

NOTE:
CCL HEATMAP GENERATED USING COMPARISON
BETWEEN CCL LIFT 2 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 0.40m	■
0.40m to 0.45m	■
0.45m to 0.60m	■
0.60m to 0.70m	■
> 0.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
CCL
HEAT MAP

DATE AUG 2, 2022

DRAWN JTS

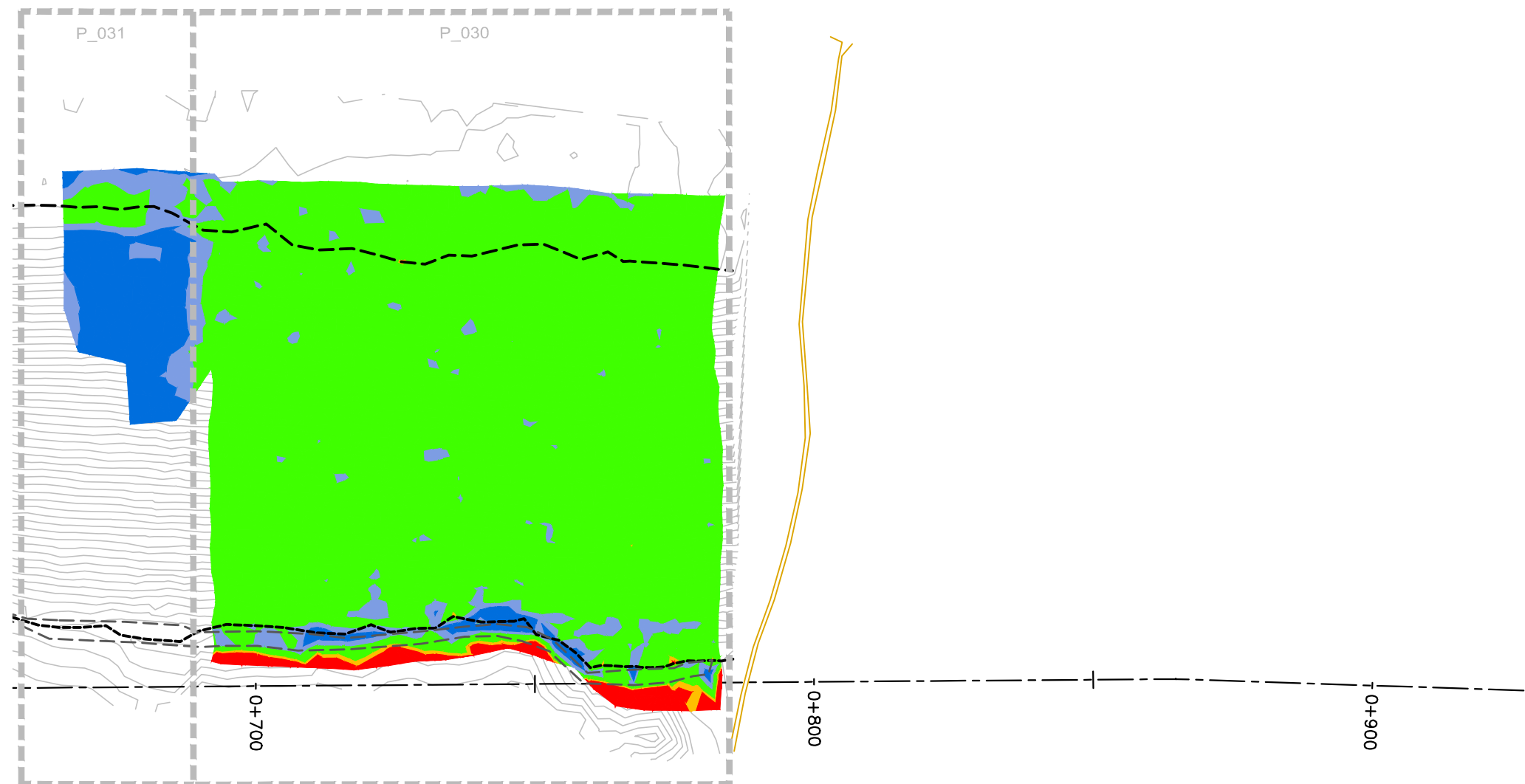
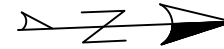
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-1	19-1138	119

EMRS RECLAMATION – CCL HEAT MAP
(AUG 2, 2022) SCALE: N.T.S.

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

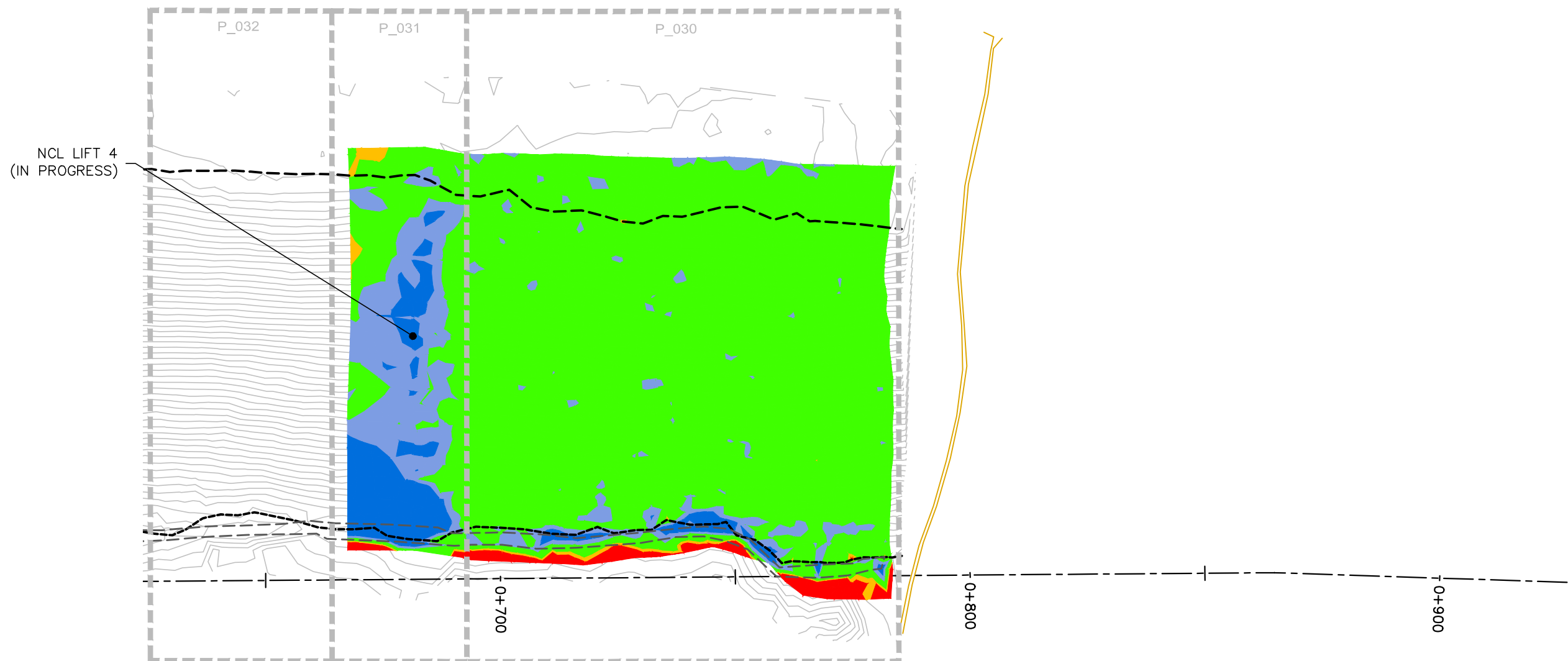
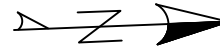
PURPOSE
NCL
HEAT MAP

DATE JULY 10, 2022
DRAWN JTS
CHECKED
SCALE NTS

DWG. No. PROJECT No. PHASE No.
H-2 | 19-1138 | 119

EMRS RECLAMATION – NCL HEAT MAP
(JULY 10, 2022 SCALE: N.T.S.)

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
NCL
HEAT MAP

DATE JULY 14, 2022

DRAWN JTS

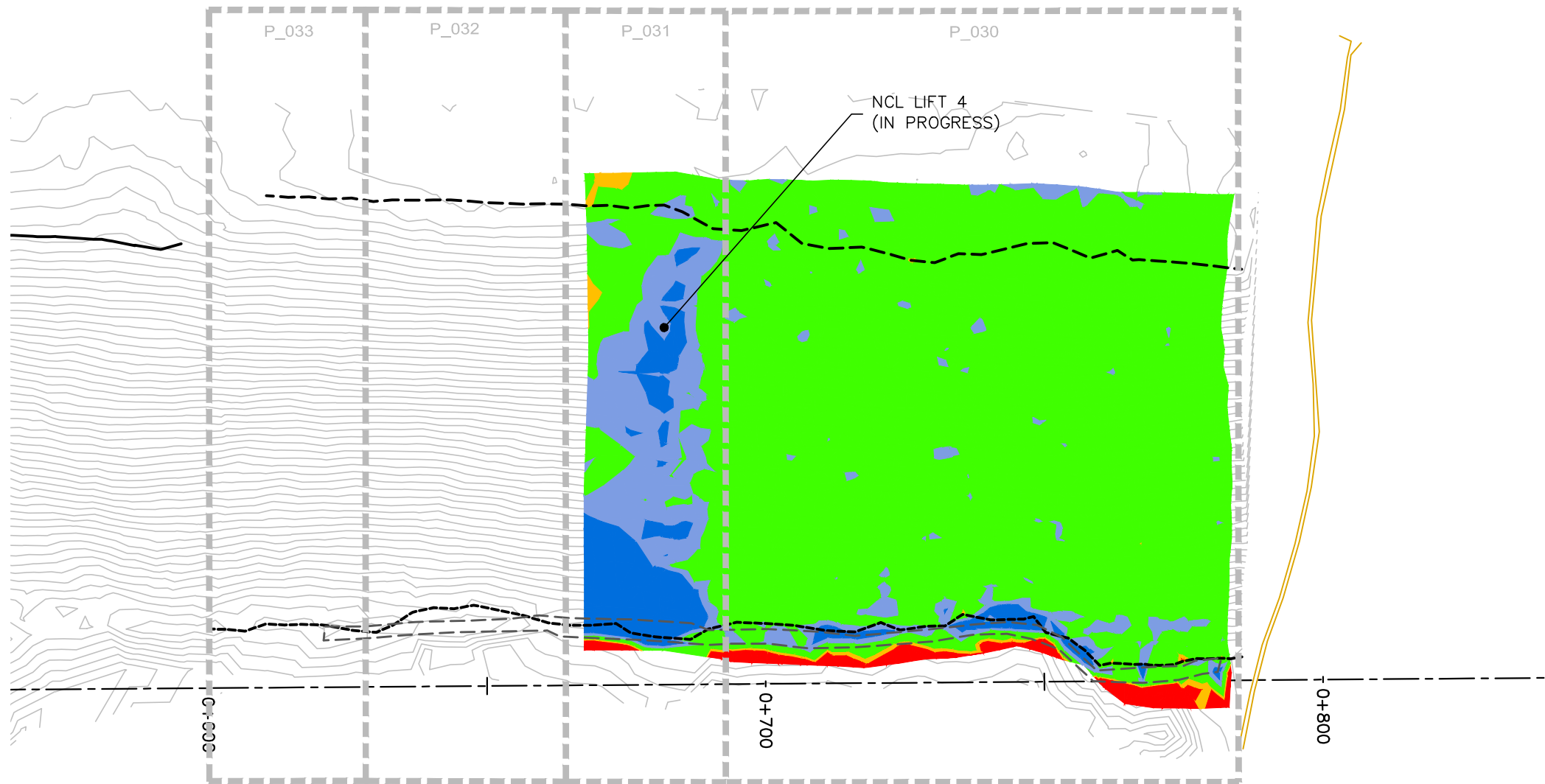
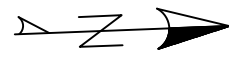
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION – NCL HEAT MAP
(JULY 14, 2022 SCALE: N.T.S.)

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
NCL
HEAT MAP

DATE JULY 16, 2022

DRAWN JTS

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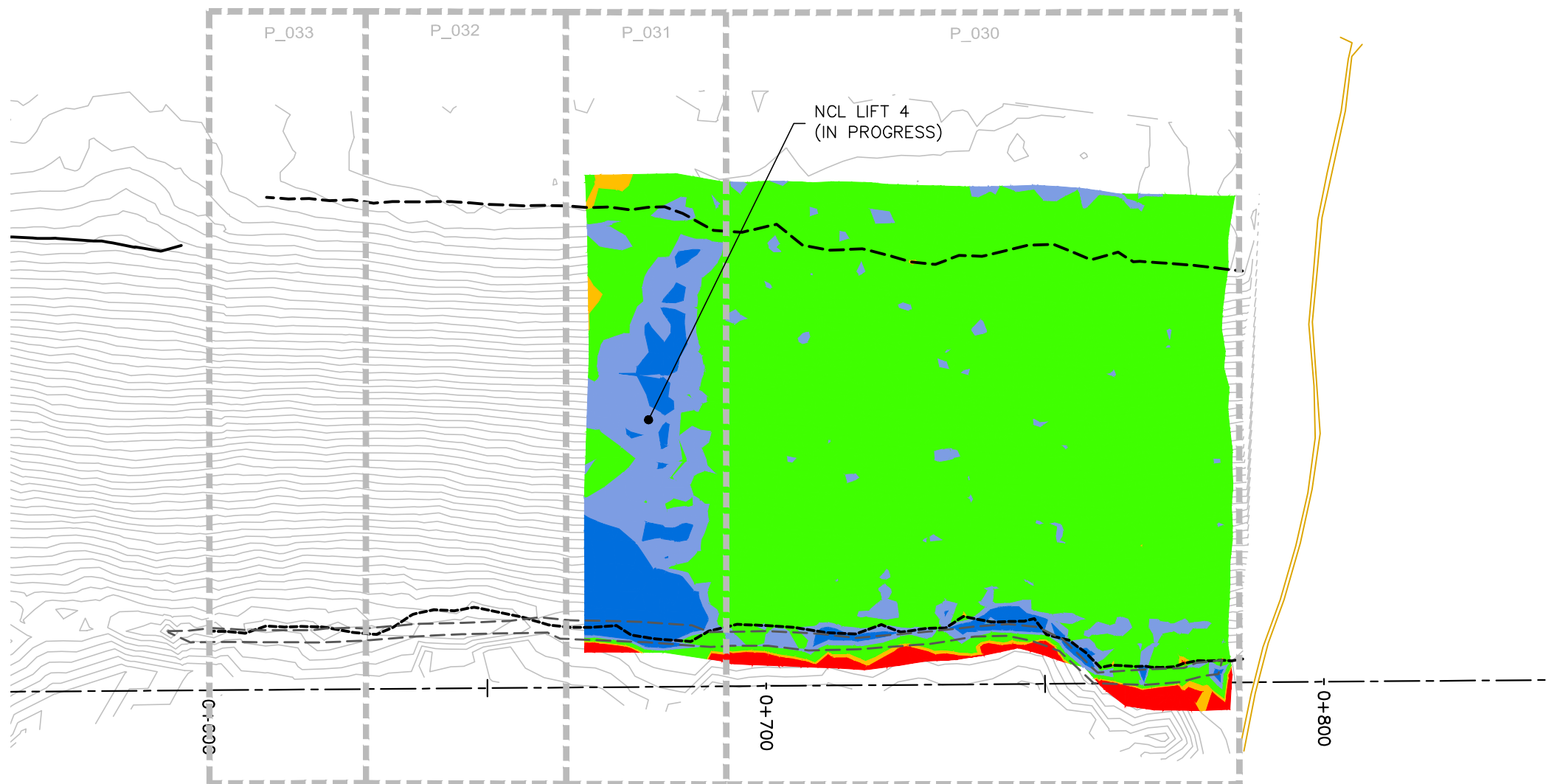
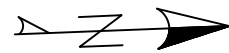
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION — NCL HEAT MAP

(JULY 16, 2022) SCALE: N.T.S.

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
NCL
HEAT MAP

DATE JULY 17, 2022

DRAWN JTS

CHECKED

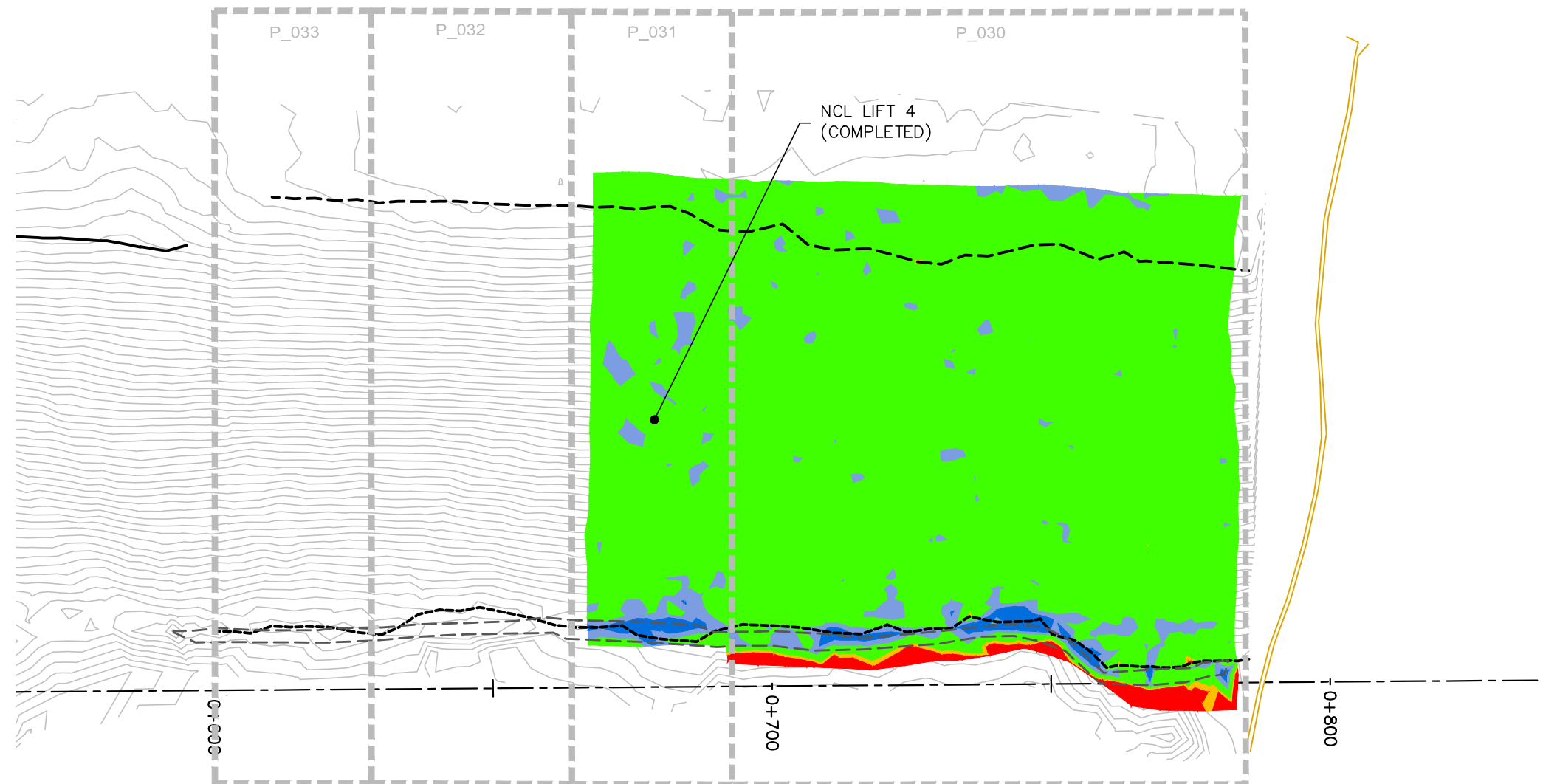
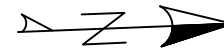
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION — NCL HEAT MAP

(JULY 17, 2022) SCALE: N.T.S.

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
NCL
HEAT MAP

DATE JULY 21, 2022

DRAWN JTS

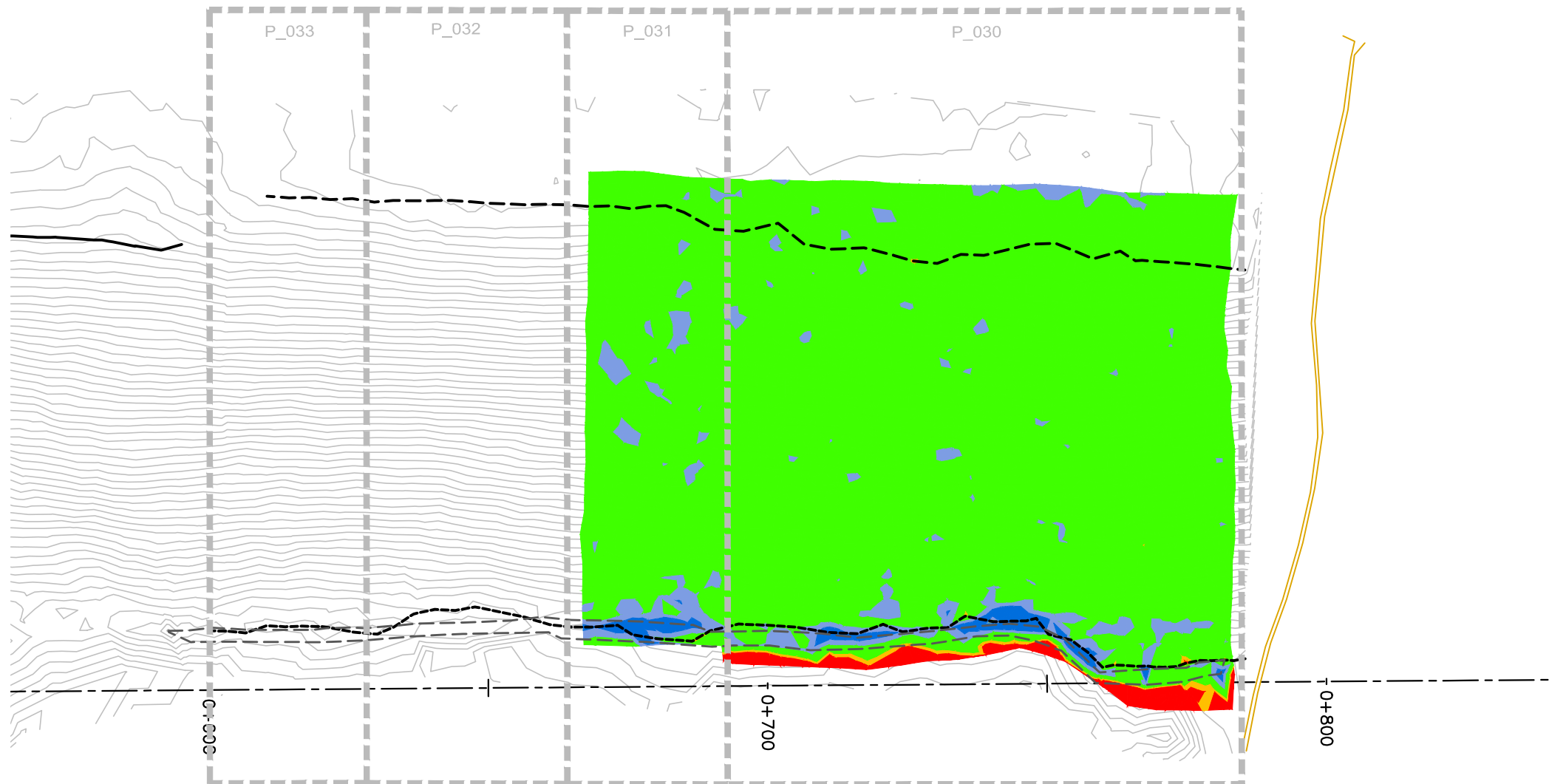
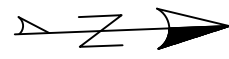
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION – NCL HEAT MAP
(JULY 21, 2022 SCALE: N.T.S.)

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
8 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
NCL
HEAT MAP

DATE JULY 22, 2022

DRAWN JTS

CHECKED

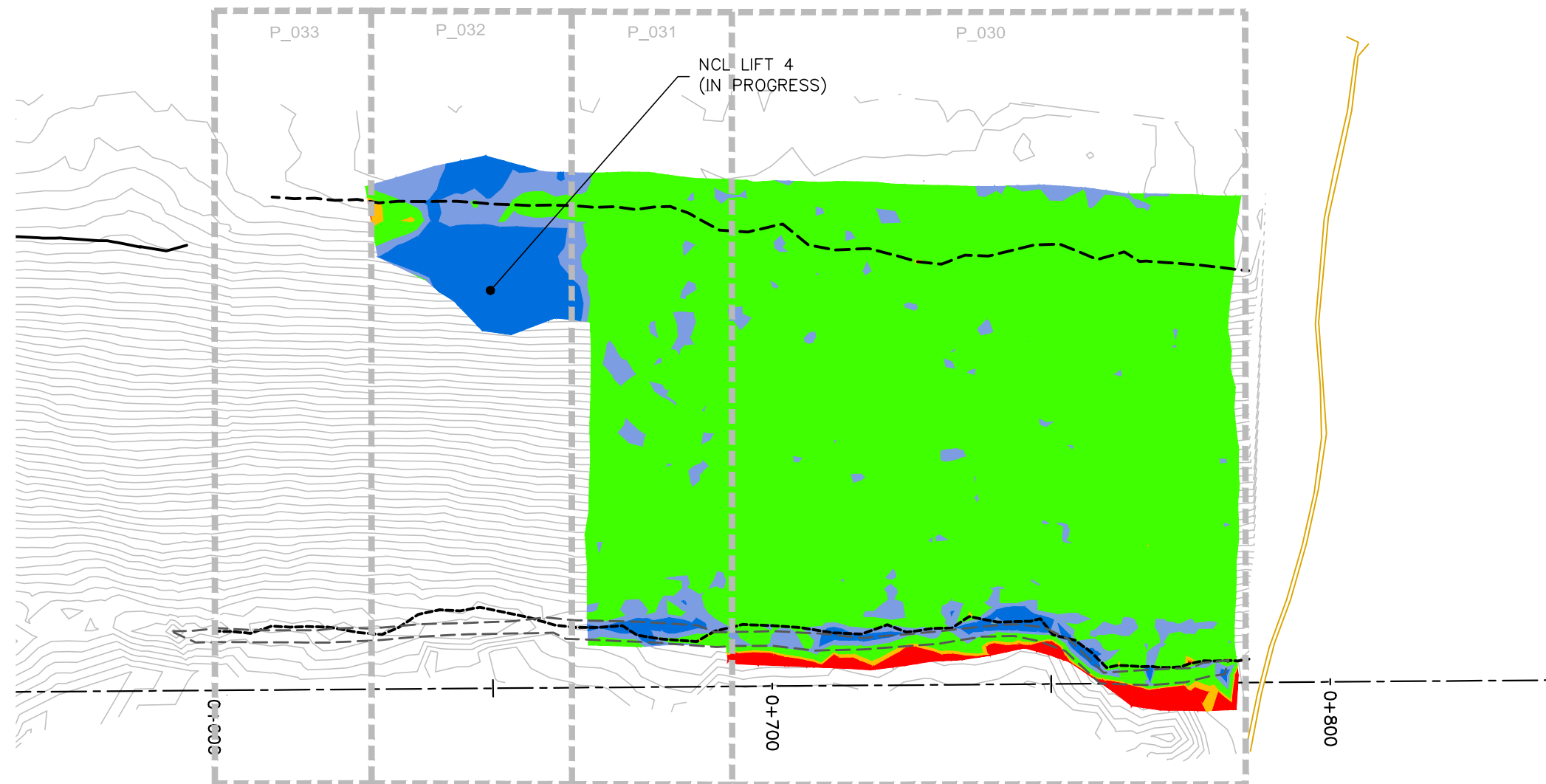
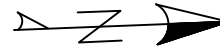
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION — NCL HEAT MAP

(JULY 22, 2022) SCALE: N.T.S.

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

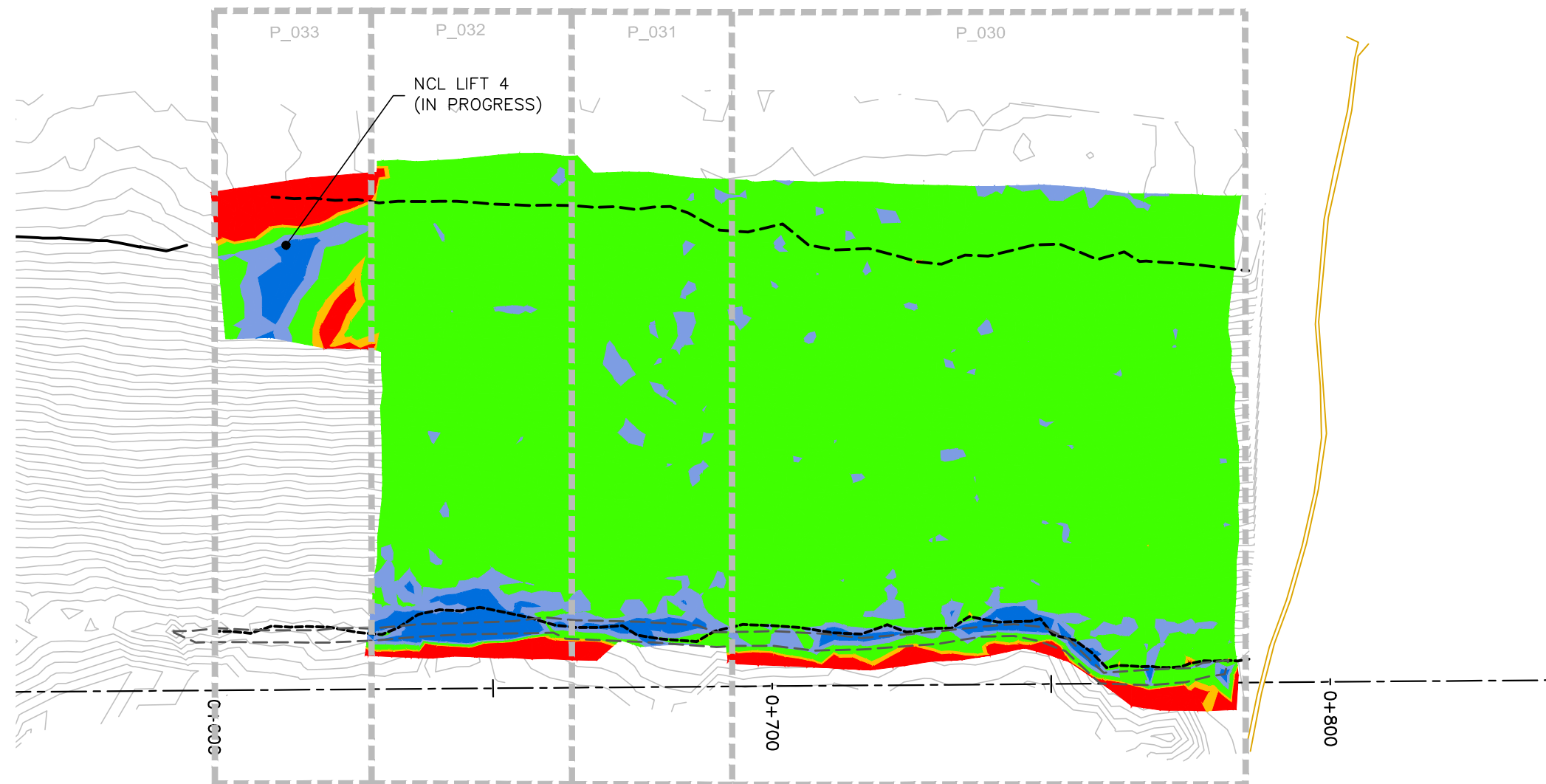
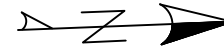
PURPOSE
NCL
HEAT MAP

DATE JULY 25, 2022
DRAWN JTS
CHECKED
SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION – NCL HEAT MAP
(JULY 25, 2022 SCALE: N.T.S.)

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	█
1.40m to 1.45m	█
1.45m to 1.60m	█
1.60m to 1.70m	█
> 1.70m	█

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
NCL
HEAT MAP

DATE JULY 30, 2022

DRAWN JTS

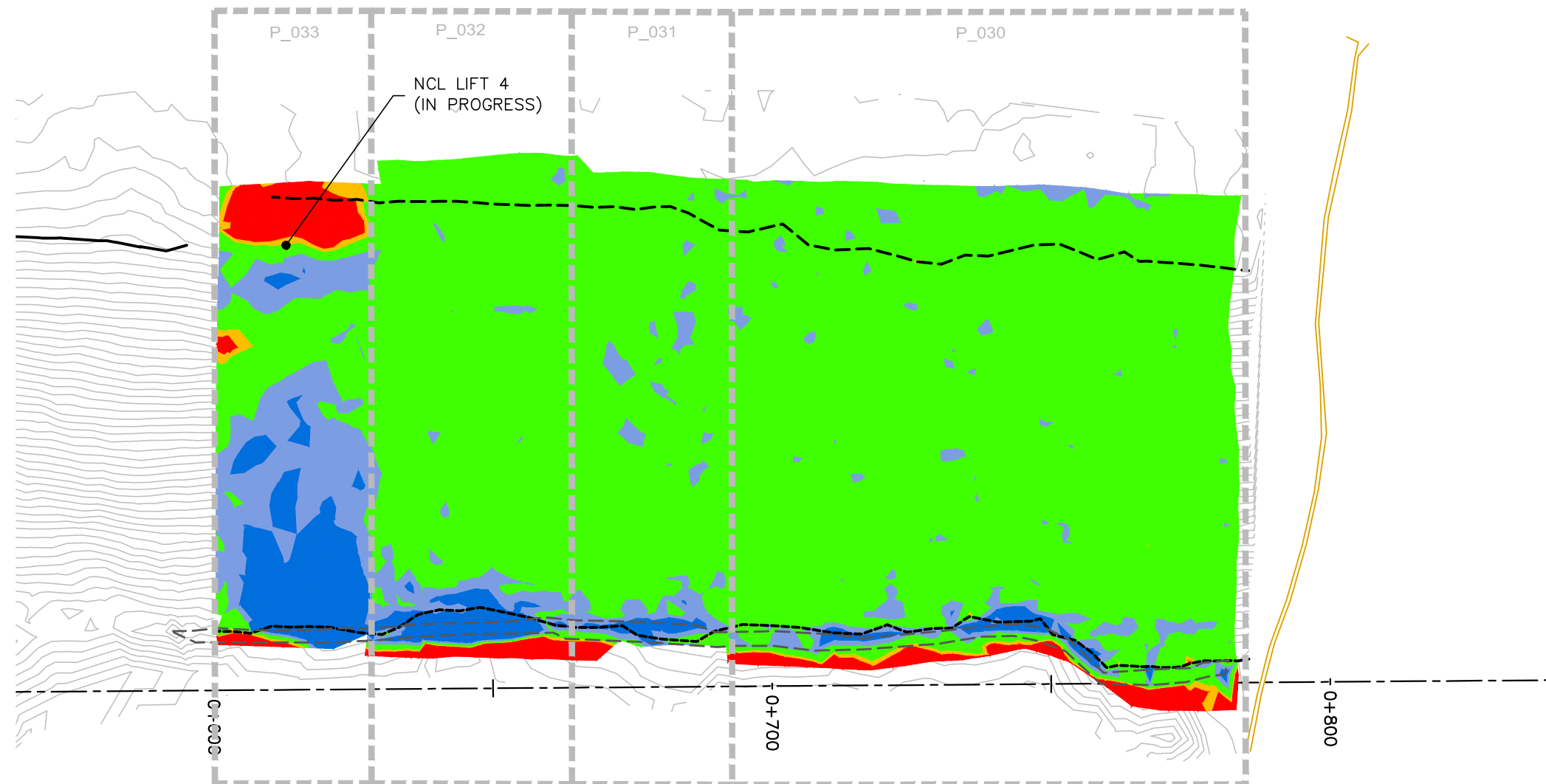
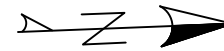
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION – NCL HEAT MAP
(JULY 30, 2022 SCALE: N.T.S.)

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
NCL
HEAT MAP

DATE JULY 31, 2022

DRAWN JTS

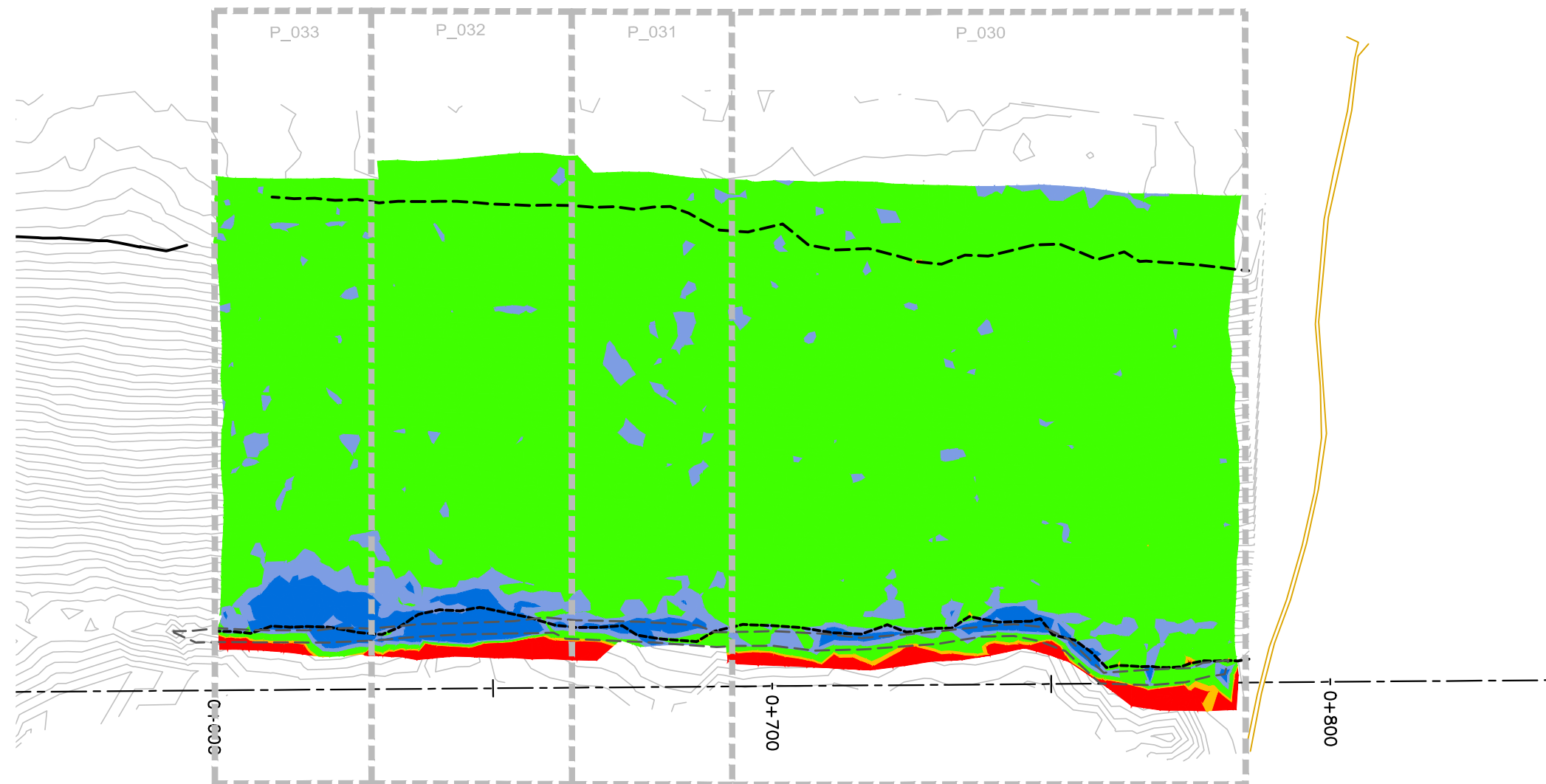
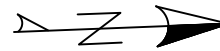
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SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION – NCL HEAT MAP
(JULY 31, 2022 SCALE: N.T.S.)

NOTE:
NCL HEATMAP GENERATED USING COMPARISON
BETWEEN NCL LIFT 4 AND OG BASE SURVEY



REVISIONS	
DATE	REMARKS

LEGEND	
< 1.40m	■
1.40m to 1.45m	■
1.45m to 1.60m	■
1.60m to 1.70m	■
> 1.70m	■

Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION

PURPOSE
NCL
HEAT MAP

DATE AUG 2, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
H-2	19-1138	119

EMRS RECLAMATION – NCL HEAT MAP
(AUG 2, 2022) SCALE: N.T.S.

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 23, 2022 = 0m³
 EXCAVATED TO DATE = 0m³

CCL LIFT 1

PLACED MAY 23, 2022 = 0m³
 PLACED TO DATE = 0m³

CCL LIFT 2

PLACED MAY 23, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 3

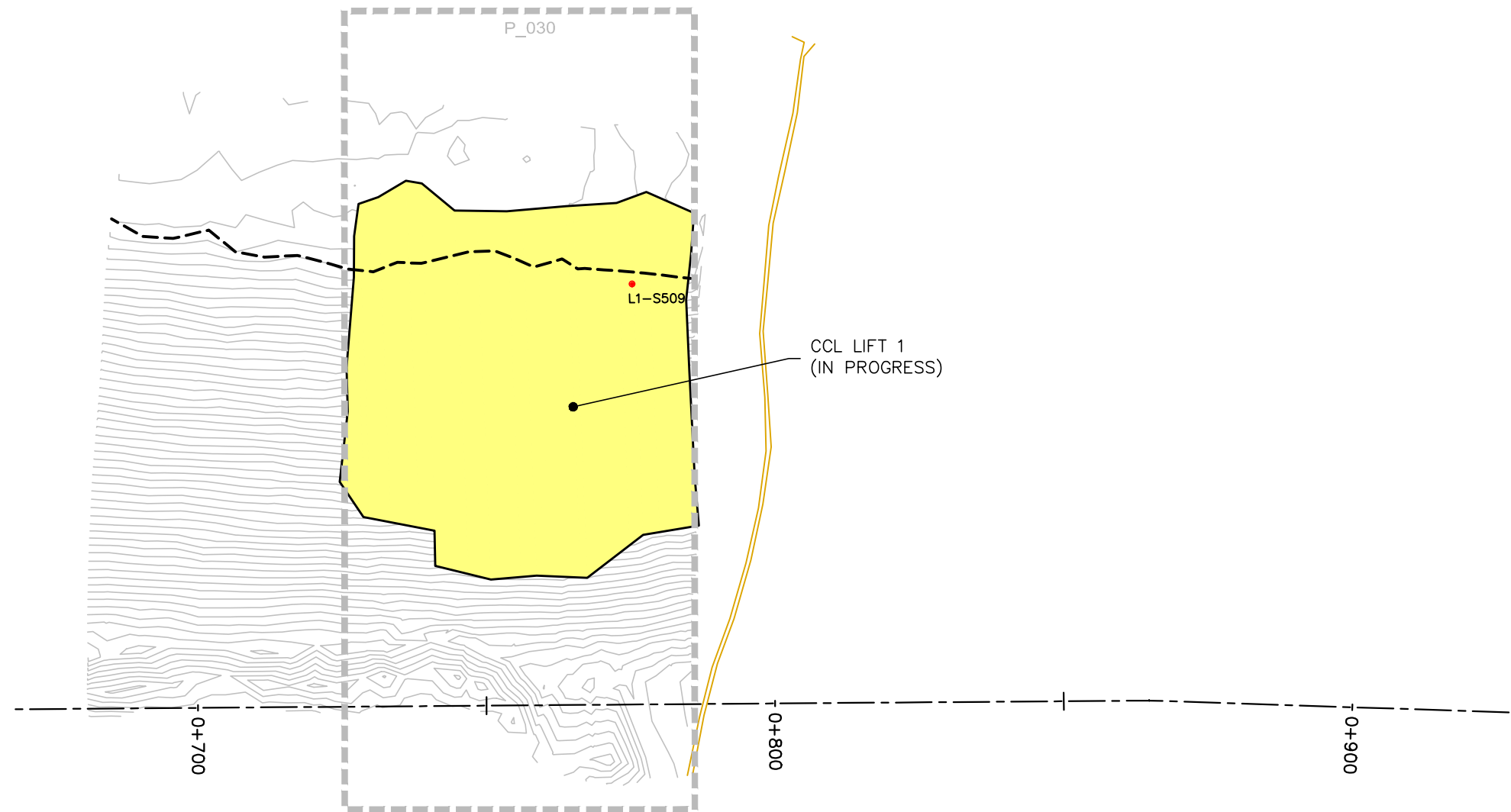
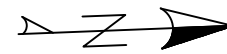
PLACED MAY 23, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 23, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

CCL COMPLETED TO DATE = 0 ha
 NCL COMPLETED TO DATE = 0 ha



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE MAY 23, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
 D-1 | 19-1138 | 119

EMRS RECLAMATION — DAILY PROGRESS

(MAY 23, 2022) SCALE: 1:1000

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 24, 2022 = 347m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED MAY 24, 2022 = 452m³
 PLACED TO DATE = 452m³

CCL LIFT 2

PLACED MAY 24, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 3

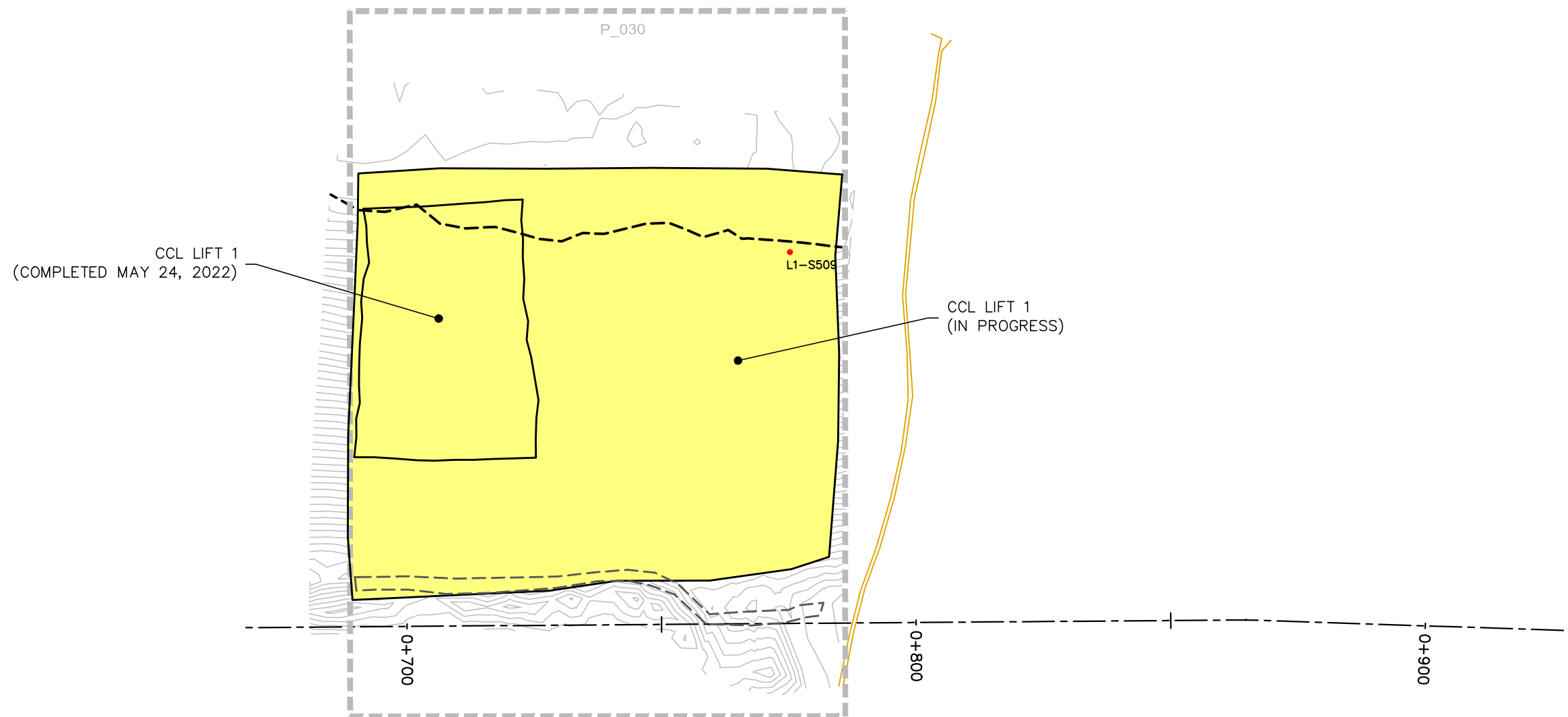
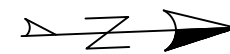
PLACED MAY 24, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 24, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

CCL COMPLETED TO DATE = 0 ha
 NCL COMPLETED TO DATE = 0 ha



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE MAY 24, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

EMRS RECLAMATION — DAILY PROGRESS

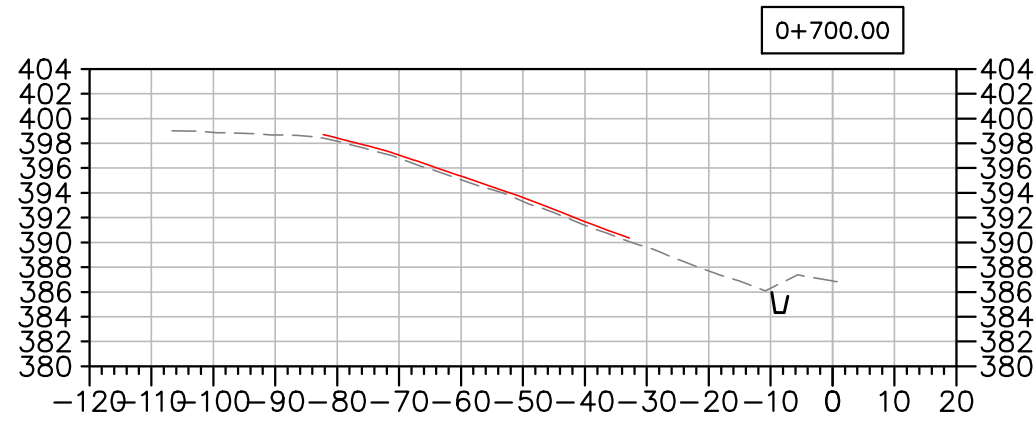
(MAY 24, 2022) SCALE: 1:1000

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 ---
- CCL LIFT #2 ---
- NCL LIFT #3 ---
- NCL LIFT #4 ---
- KEY TRENCH ---



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE MAY 24, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS
(MAY 24, 2022) SCALE: N.T.S.

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 25, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED MAY 25, 2022 = 1,927m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED MAY 25, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 3

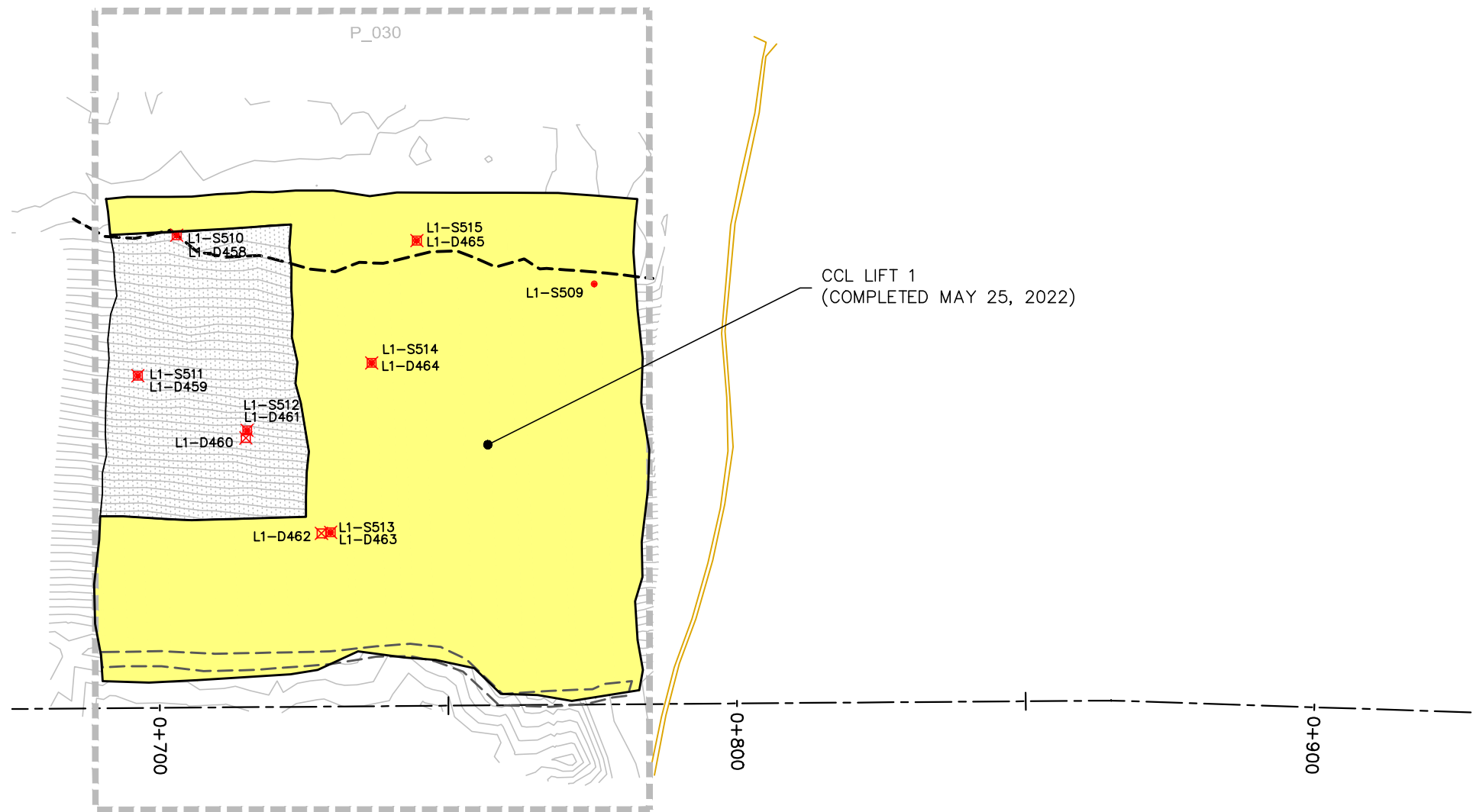
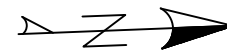
PLACED MAY 25, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 25, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

CCL COMPLETED TO DATE = 0 ha
 NCL COMPLETED TO DATE = 0 ha



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE MAY 25, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

EMRS RECLAMATION — DAILY PROGRESS

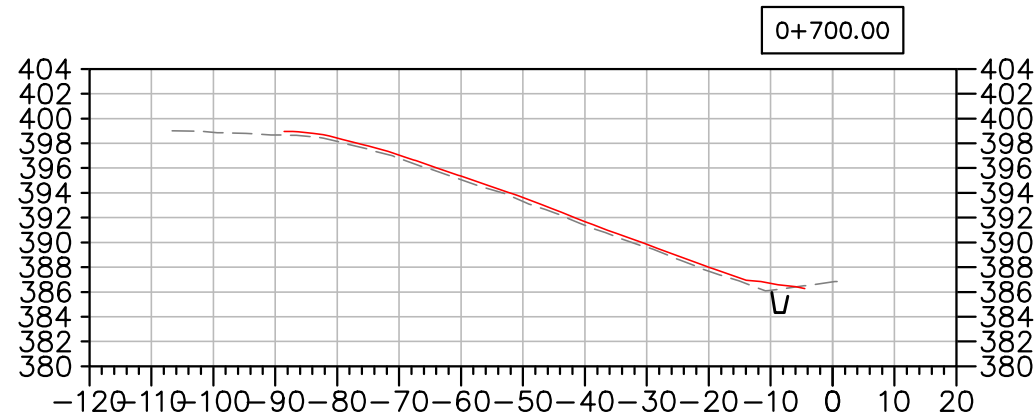
(MAY 25, 2022) SCALE: 1:1000

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE
MAY 25, 2022

DRAWN
JTS

CHECKED

SCALE
NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS

(MAY 25, 2022) SCALE: N.T.S.

Horizontal Datum: North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum, 1928 Adjustment, Geodetic Elevations



EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 26, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED MAY 26, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED MAY 26, 2022 = 937m³
 PLACED TO DATE = 937m³

NCL LIFT 3

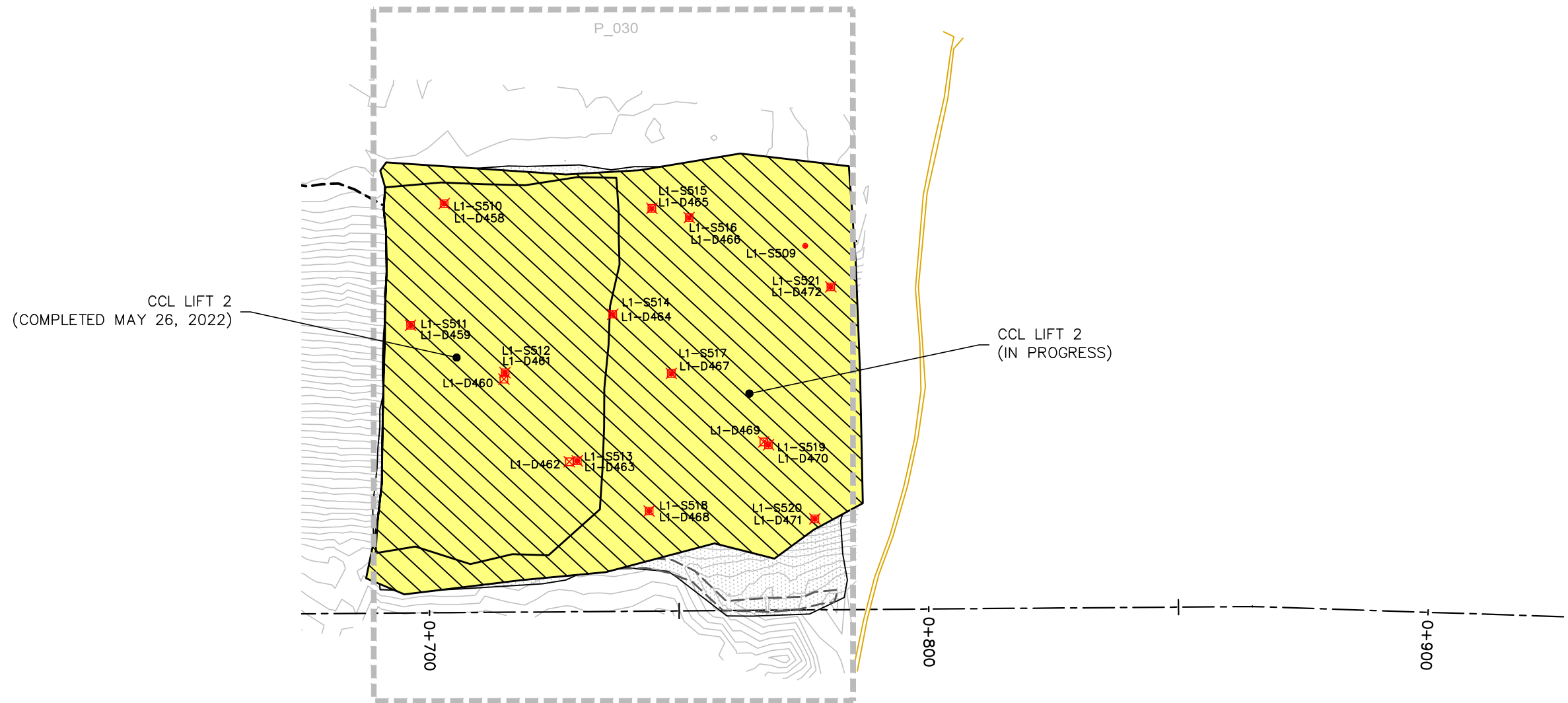
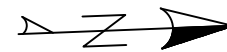
PLACED MAY 26, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 26, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

CCL COMPLETED TO DATE = 0.3363 ha
 NCL COMPLETED TO DATE = 0 ha



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	

PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	MAY 26, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

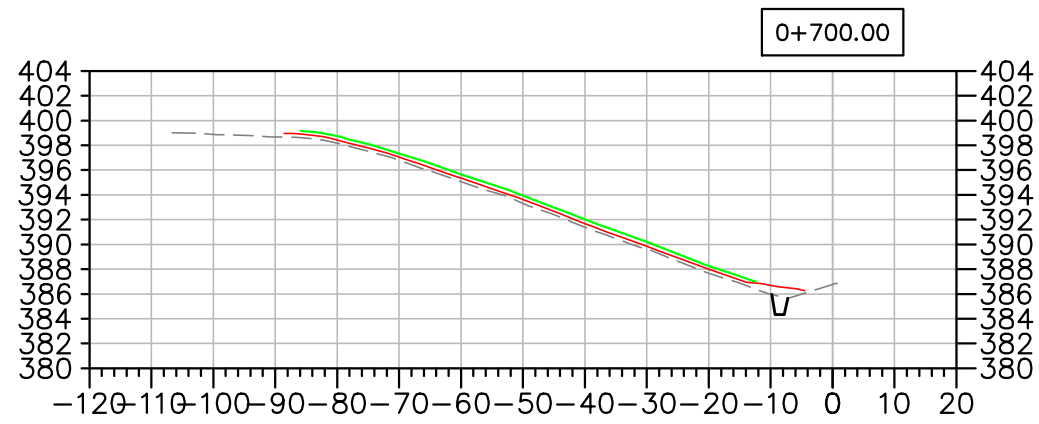
EMRS RECLAMATION – DAILY PROGRESS
 (MAY 26, 2022) SCALE: 1:1000

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE
MAY 26, 2022

DRAWN
JTS

CHECKED

SCALE
NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS

(MAY 26, 2022) SCALE: N.T.S.

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 27, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED MAY 27, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED MAY 27, 2022 = 1,268m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

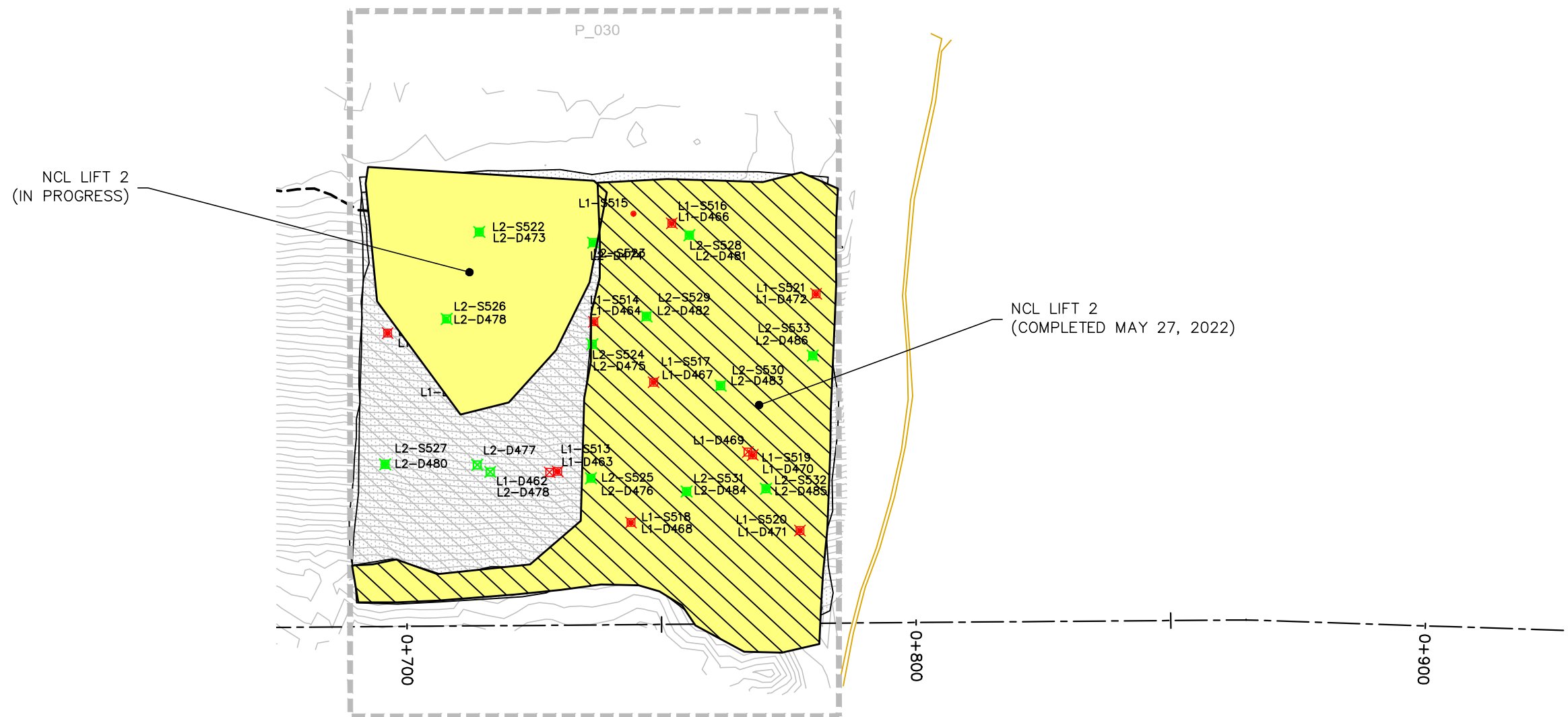
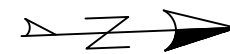
PLACED MAY 27, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 27, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	

PROJECT TITLE
**NEW GOLD INC
 RAINY RIVER
 PROJECT**

DRAWING TITLE
**2022 EMRS
 RECLAMATION**

PURPOSE
DAILY PROGRESS

DATE	MAY 27, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

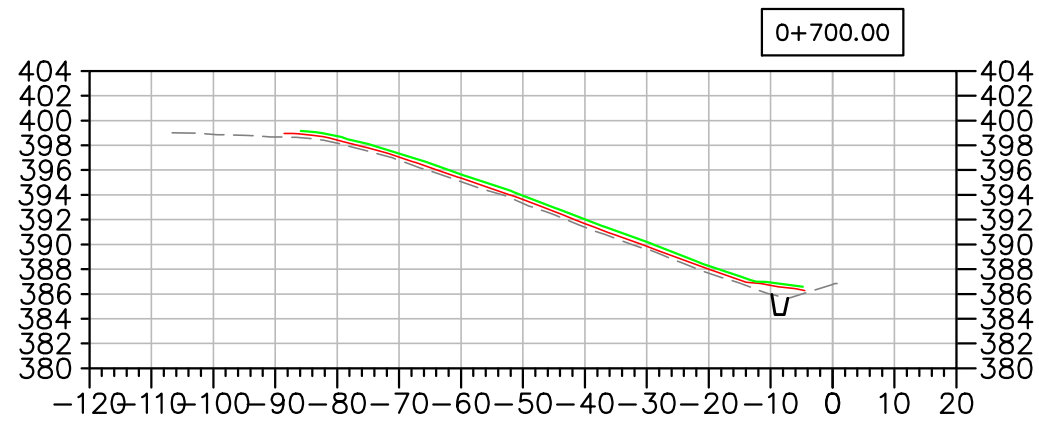
EMRS RECLAMATION – DAILY PROGRESS
 (MAY 27, 2022) SCALE: 1:1000

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE MAY 27, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 | 19-1138 | 119

EMRS RECLAMATION – DAILY PROGRESS
(MAY 27, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 28, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED MAY 28, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED MAY 28, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED MAY 28, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 28, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

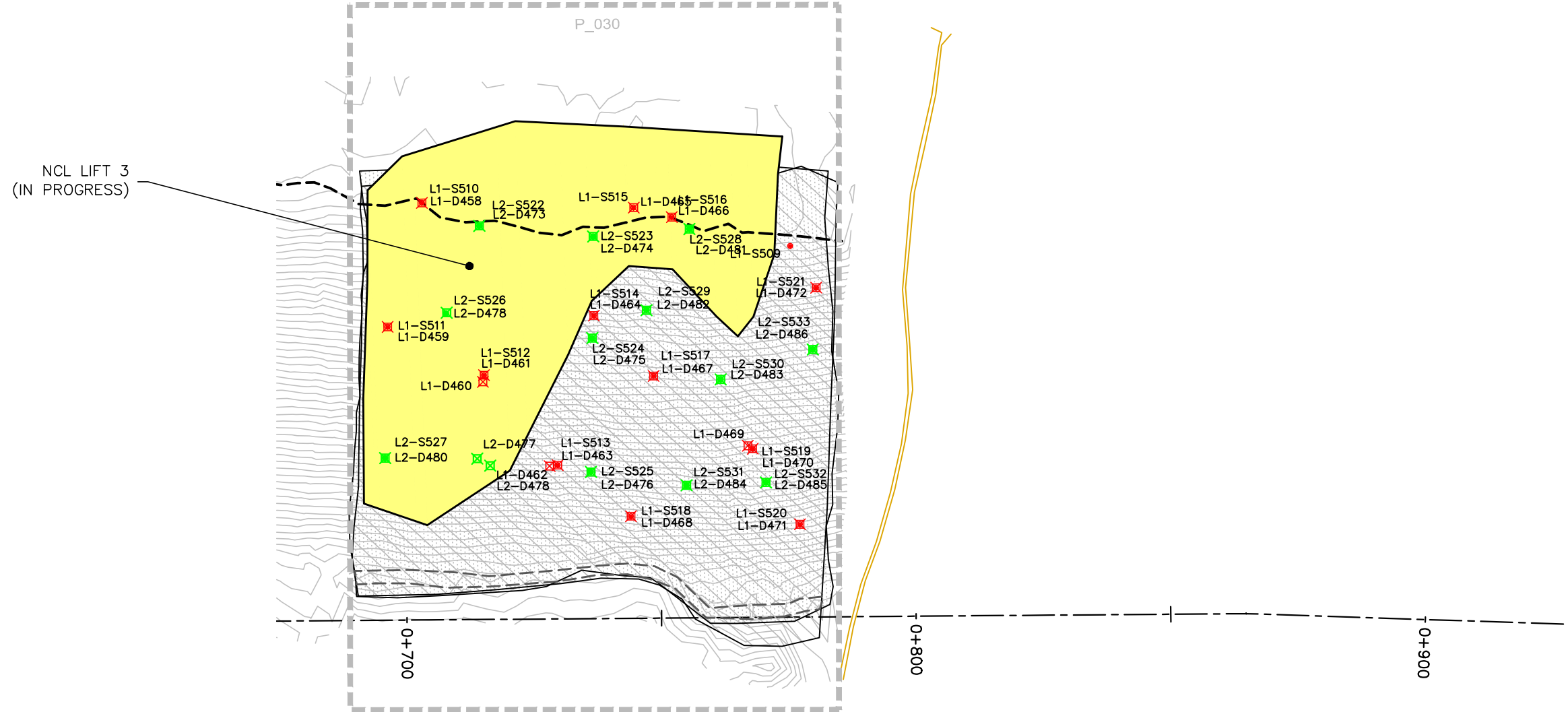
CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(MAY 28, 2022) SCALE: 1:1000

PROJECT TITLE
**NEW GOLD INC
 RAINY RIVER
 PROJECT**

DRAWING TITLE
**2022 EMRS
 RECLAMATION**

PURPOSE
DAILY PROGRESS

DATE **MAY 28, 2022**

DRAWN **JTS**

CHECKED

SCALE **NTS**

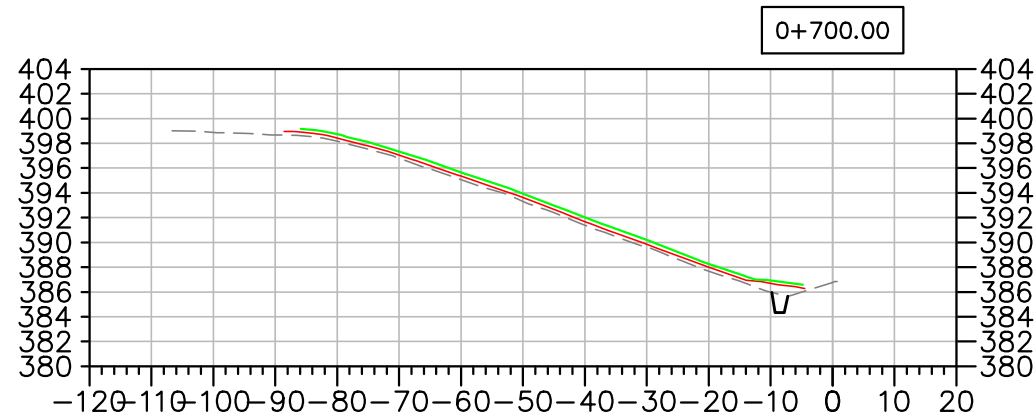
DWG. No. PROJECT No. PHASE No.
D-1 | 19-1138 | 119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE MAY 28, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS

(MAY 28, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 29, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED MAY 29, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED MAY 29, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED MAY 29, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 29, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

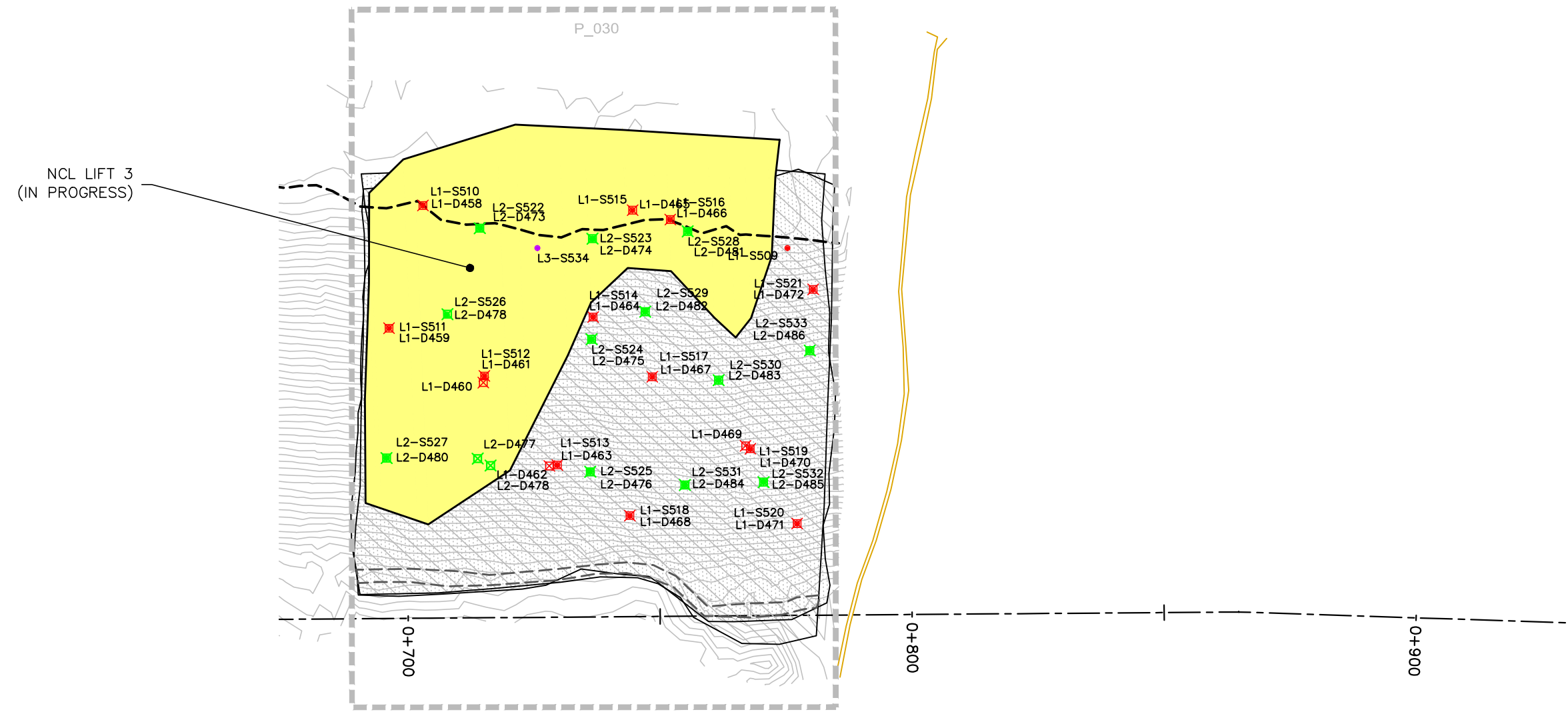
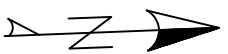
CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(MAY 29, 2022) SCALE: 1:1000

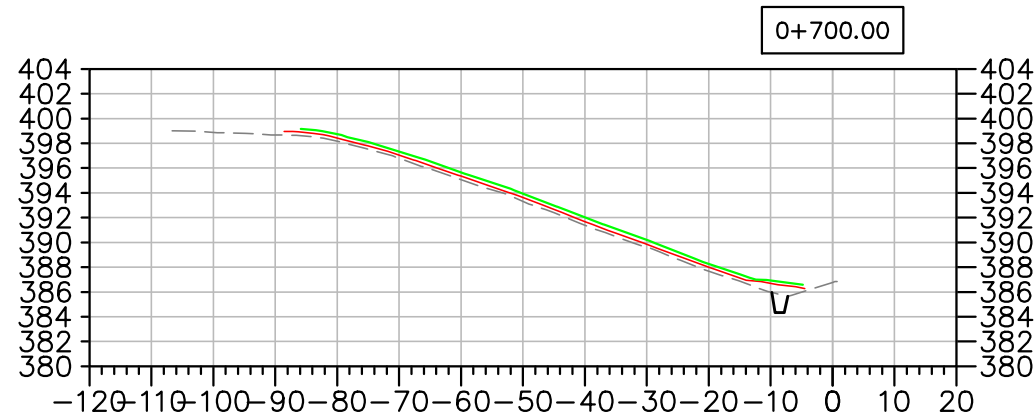
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	MAY 29, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION CROSS
 SECTIONS

PURPOSE
 DAILY PROGRESS

DATE MAY 29, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
 X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS
 (MAY 29, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 30, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED MAY 30, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED MAY 30, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED MAY 30, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 30, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

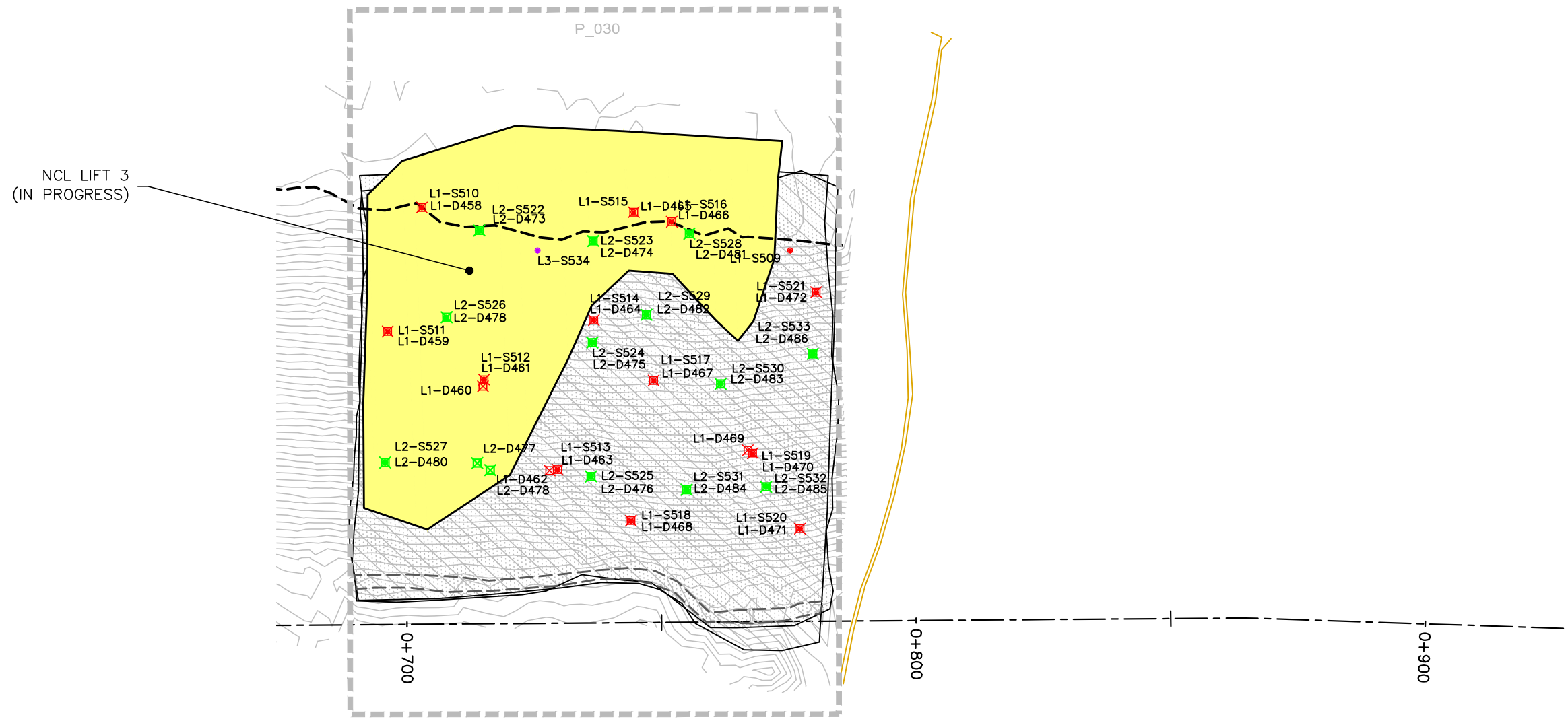
CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(MAY 30, 2022) SCALE: 1:1000

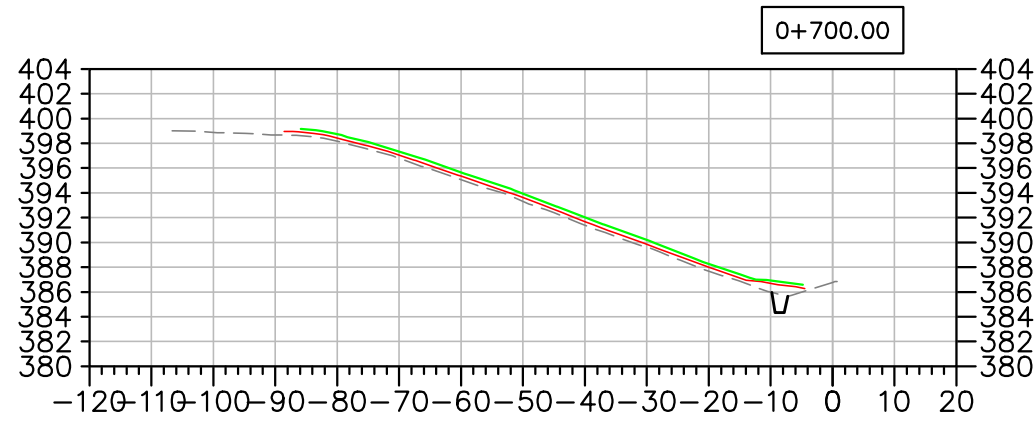
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	MAY 30, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE MAY 30, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS
(MAY 30, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED MAY 30, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED MAY 30, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED MAY 30, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED MAY 30, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED MAY 30, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

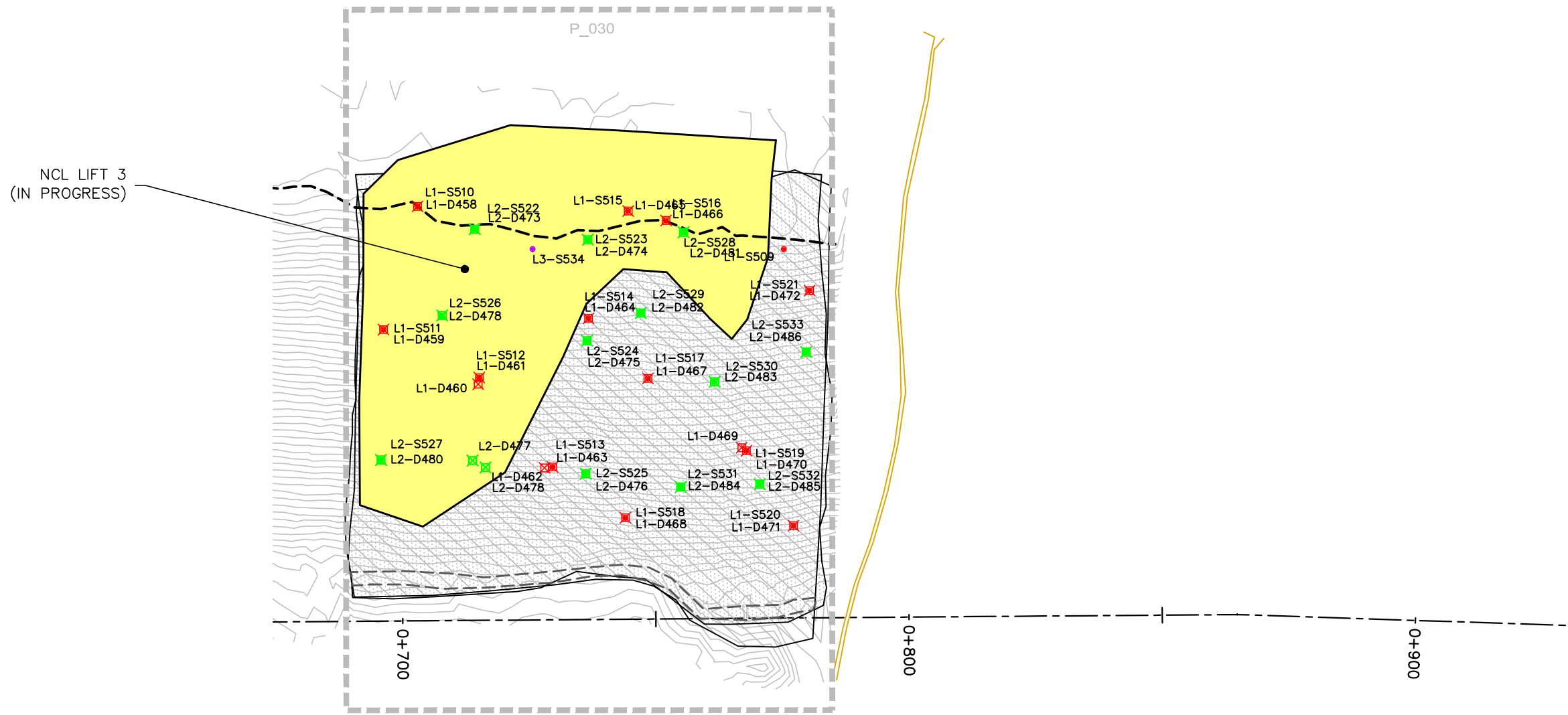
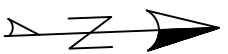
CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(MAY 31, 2022) SCALE: 1:1000

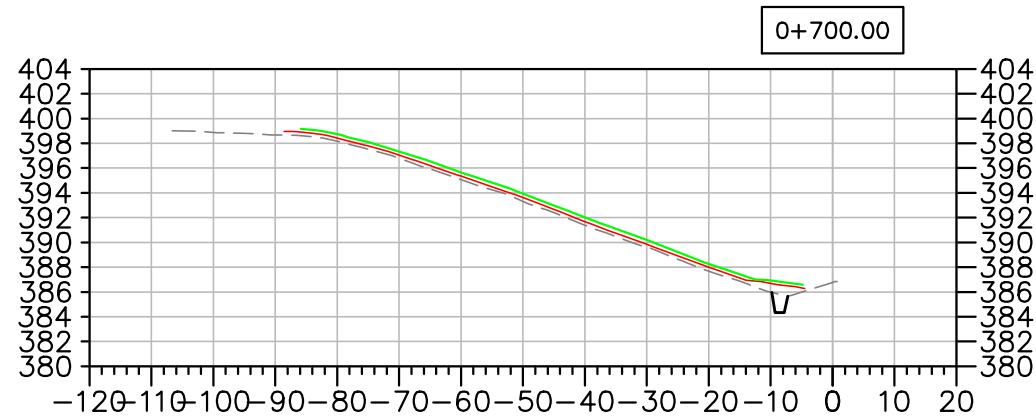
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	MAY 31, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE MAY 31, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS

(MAY 31, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JUNE 1, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED JUNE 1, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED JUNE 1, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JUNE 1, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED JUNE 1, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

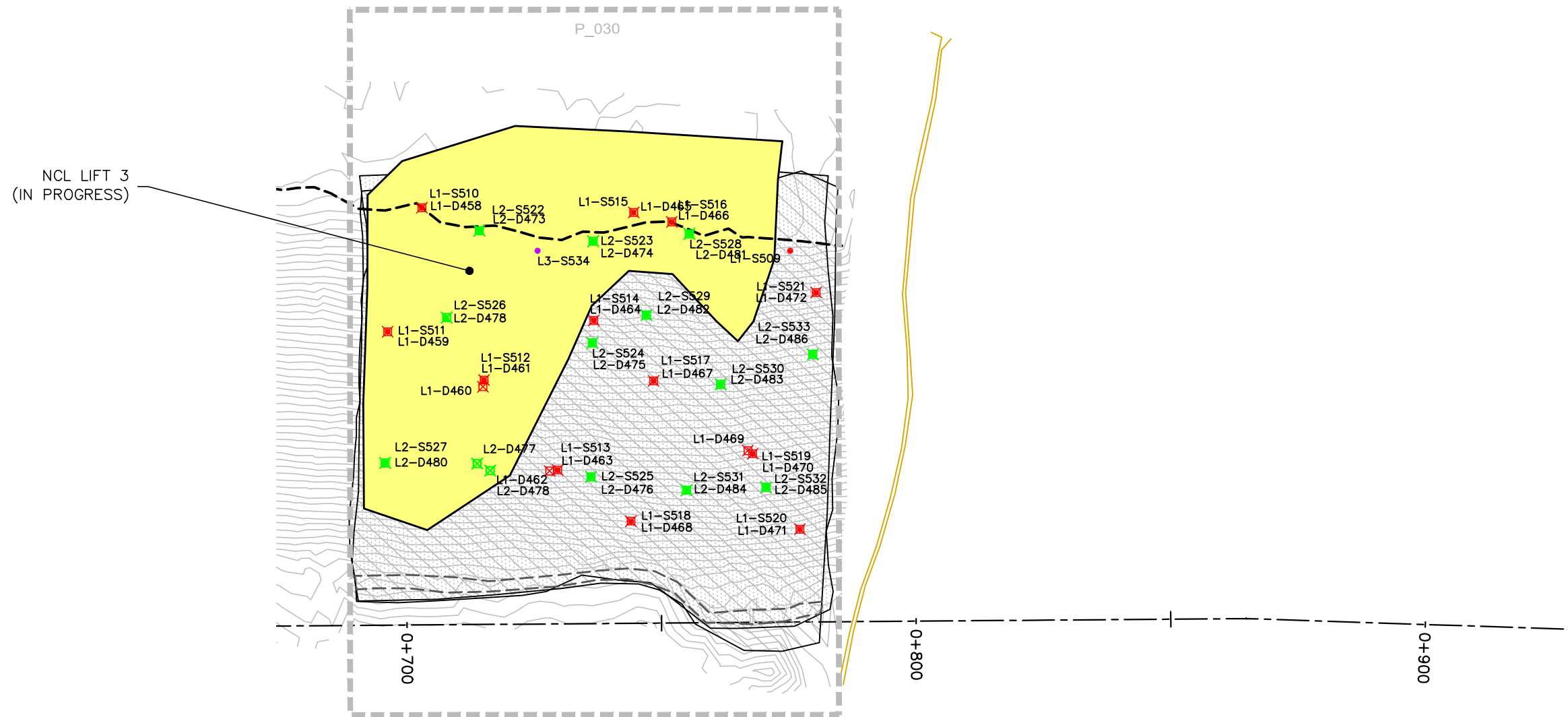
CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(JUNE 1, 2022) SCALE: 1:1000

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE JUNE 1, 2022

DRAWN JTS

CHECKED

SCALE NTS

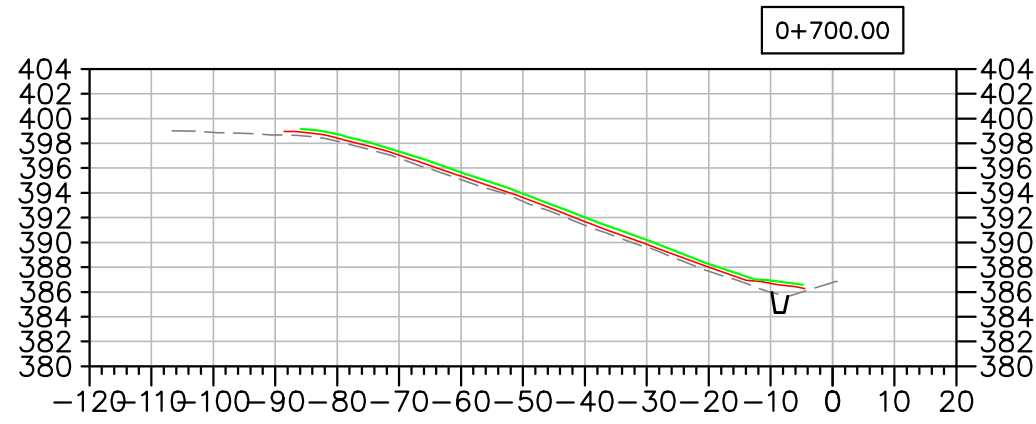
DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JUNE 1, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS

(JUNE 1, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JUNE 3, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED JUNE 3, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED JUNE 3, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JUNE 3, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED JUNE 3, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

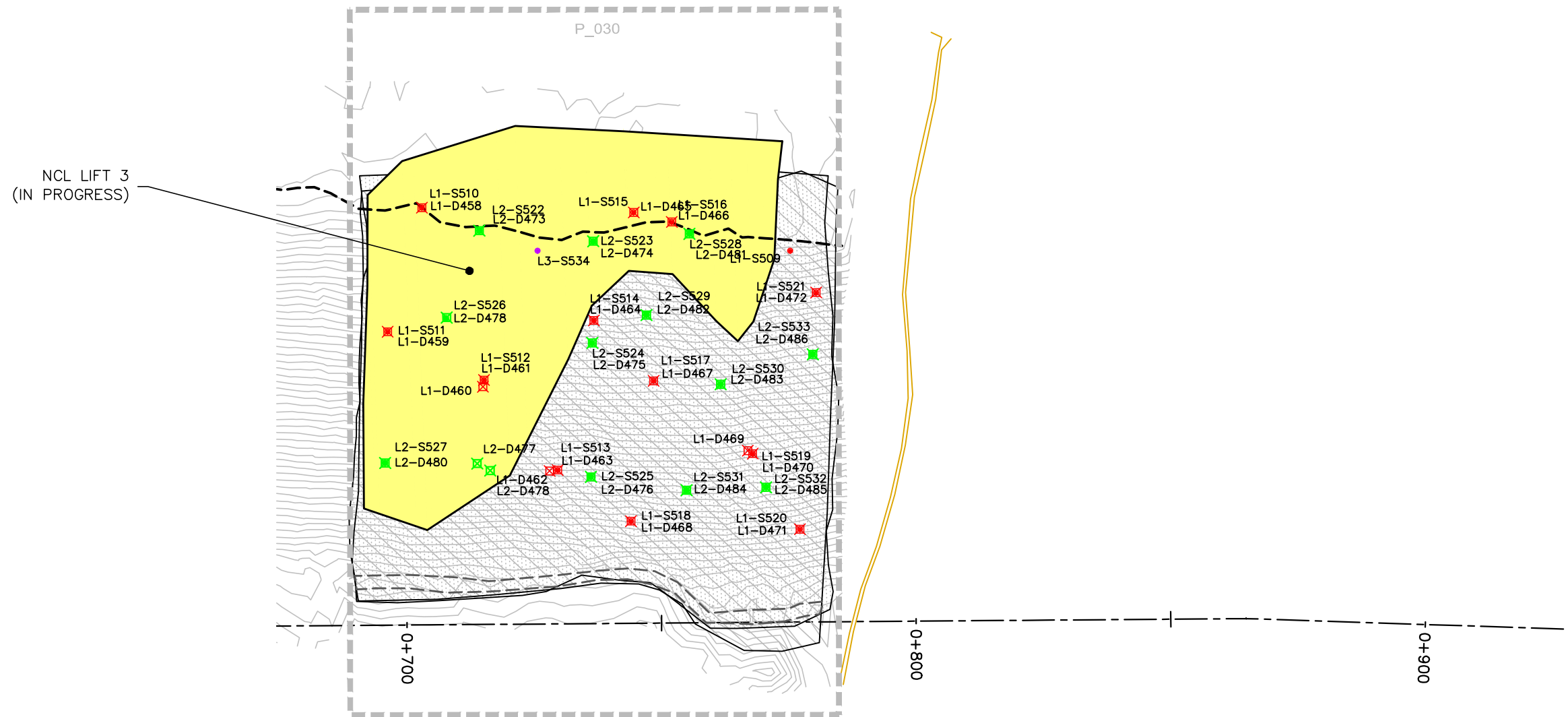
CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(JUNE 3, 2022) SCALE: 1:1000

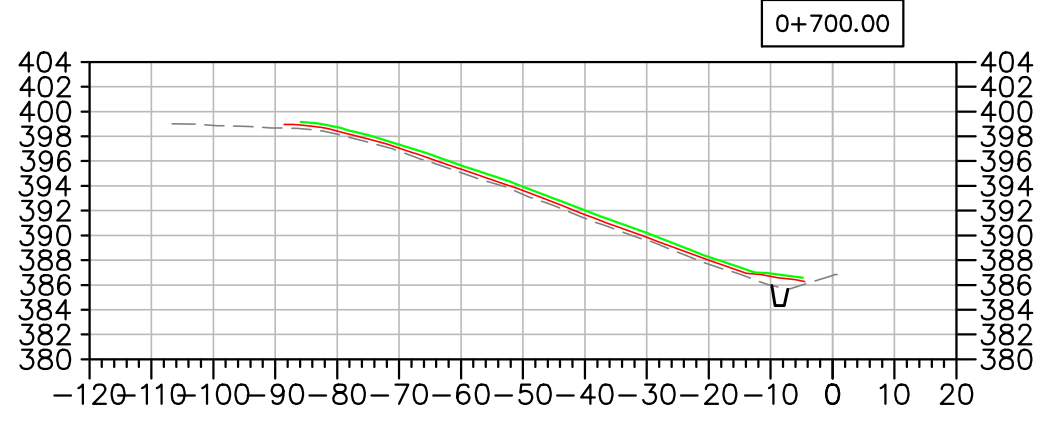
PROJECT TITLE	NEW GOLD INC RAINY RIVER PROJECT
DRAWING TITLE	2022 EMRS RECLAMATION
PURPOSE	DAILY PROGRESS

DATE	JUNE 3, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS	
DATE	REMARKS

LEGEND

EXISTING ROCK STOCKPILE	---
CCL LIFT #1	—
CCL LIFT #2	—
NCL LIFT #3	—
NCL LIFT #4	—
KEY TRENCH	—



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE
JUNE 3, 2022

DRAWN
JTS

CHECKED

SCALE
NTS

DWG. No.	PROJECT No.	PHASE No.
X-1	19-1138	119

EMRS RECLAMATION – DAILY PROGRESS
(JUNE 3, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JUNE 4, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED JUNE 4, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED JUNE 4, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JUNE 4, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED JUNE 4, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

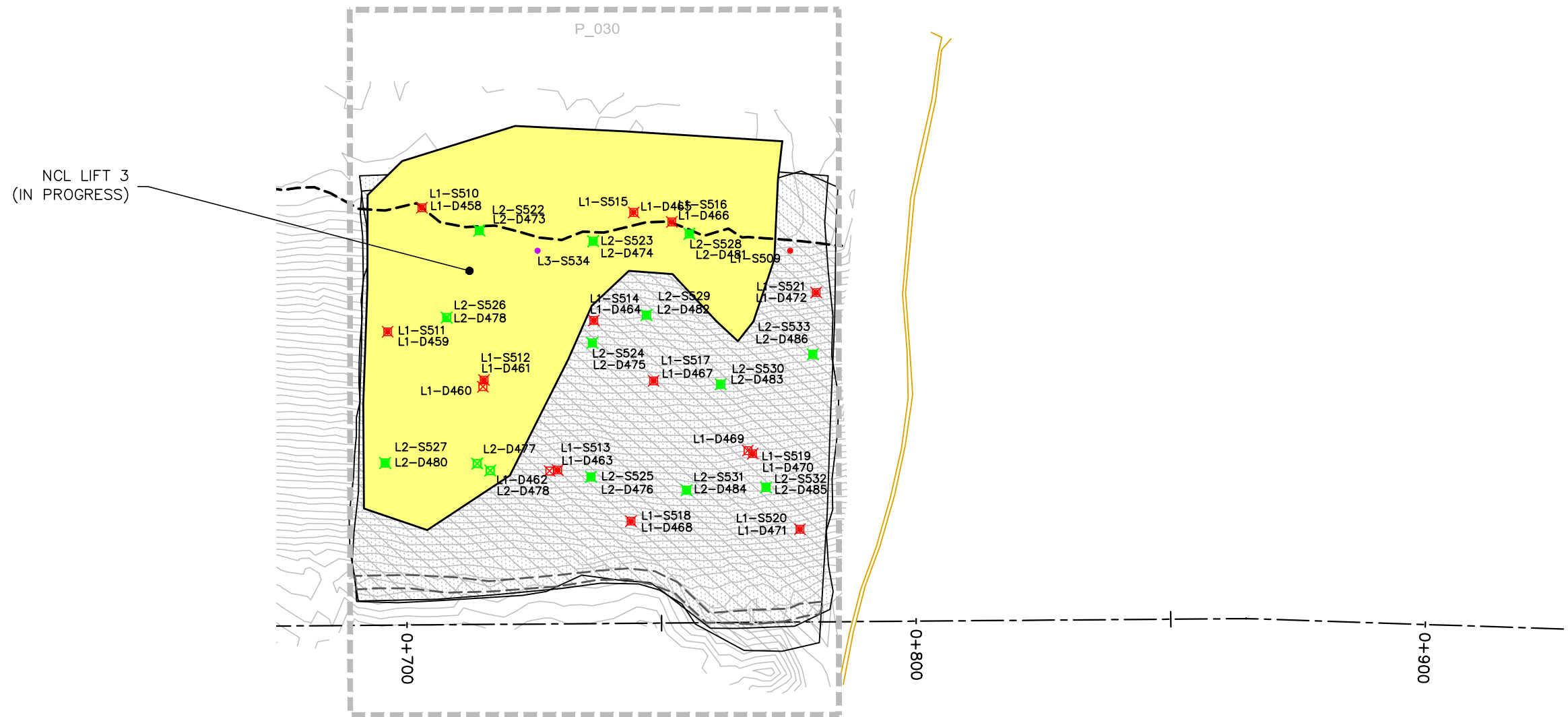
CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(JUNE 4, 2022) SCALE: 1:1000

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE JUNE 4, 2022

DRAWN JTS

CHECKED

SCALE NTS

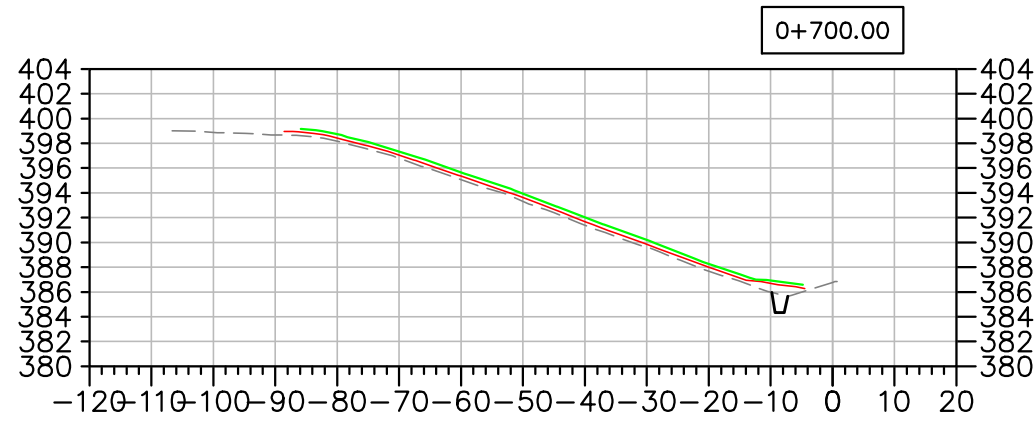
DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JUNE 4, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS

(JUNE 4, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JUNE 5, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED JUNE 5, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED JUNE 5, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JUNE 5, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED JUNE 5, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

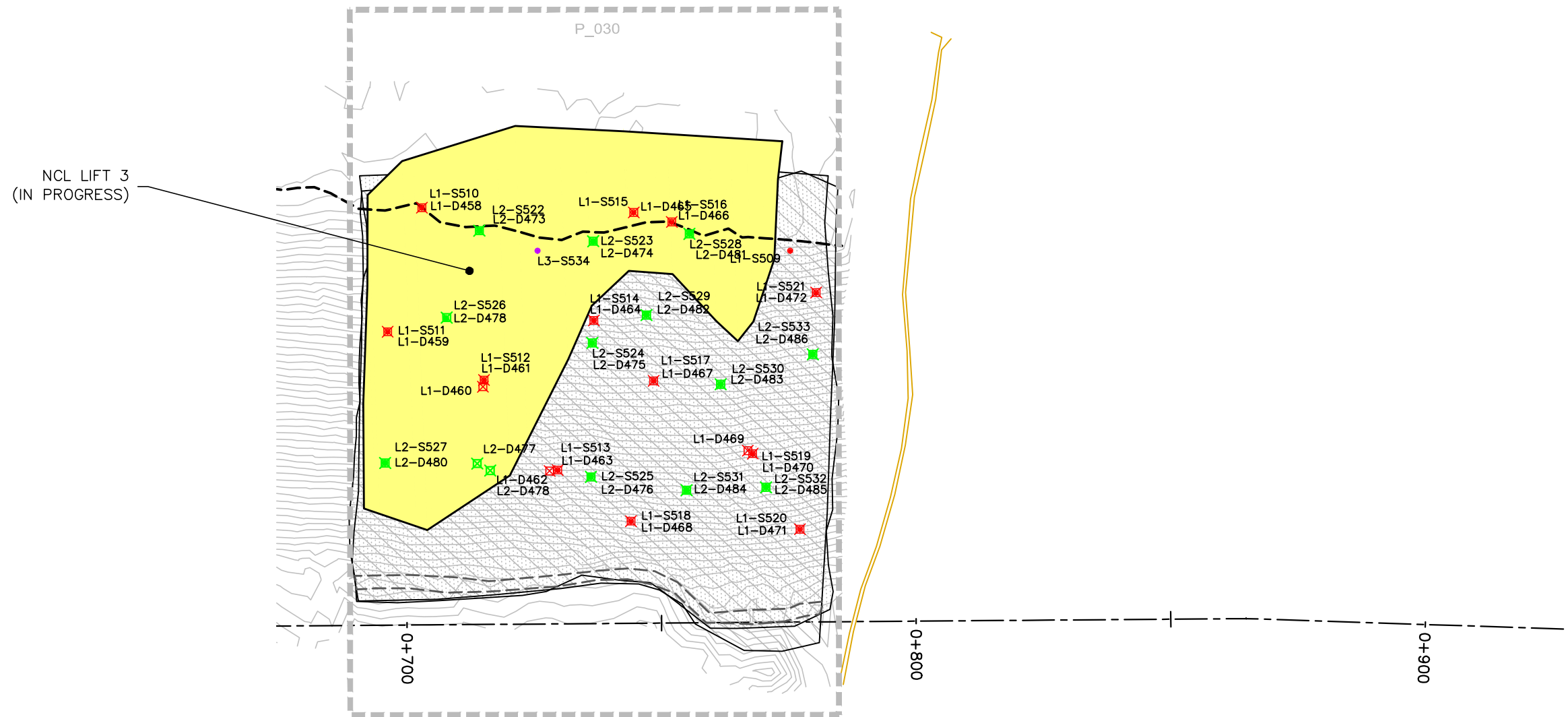
CCL COMPLETED TO DATE = 0.7841 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(JUNE 5, 2022) SCALE: 1:1000

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE JUNE 5, 2022

DRAWN JTS

CHECKED

SCALE NTS

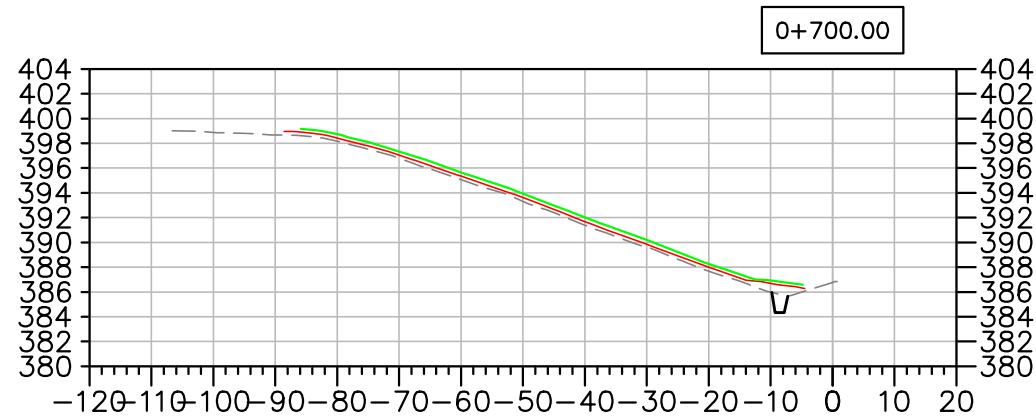
DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JUNE 5, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS
(JUNE 5, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 1, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED JULY 1, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED JULY 1, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JULY 1, 2022 = 0m³
 PLACED TO DATE = 0m³

NCL LIFT 4

PLACED JULY 1, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

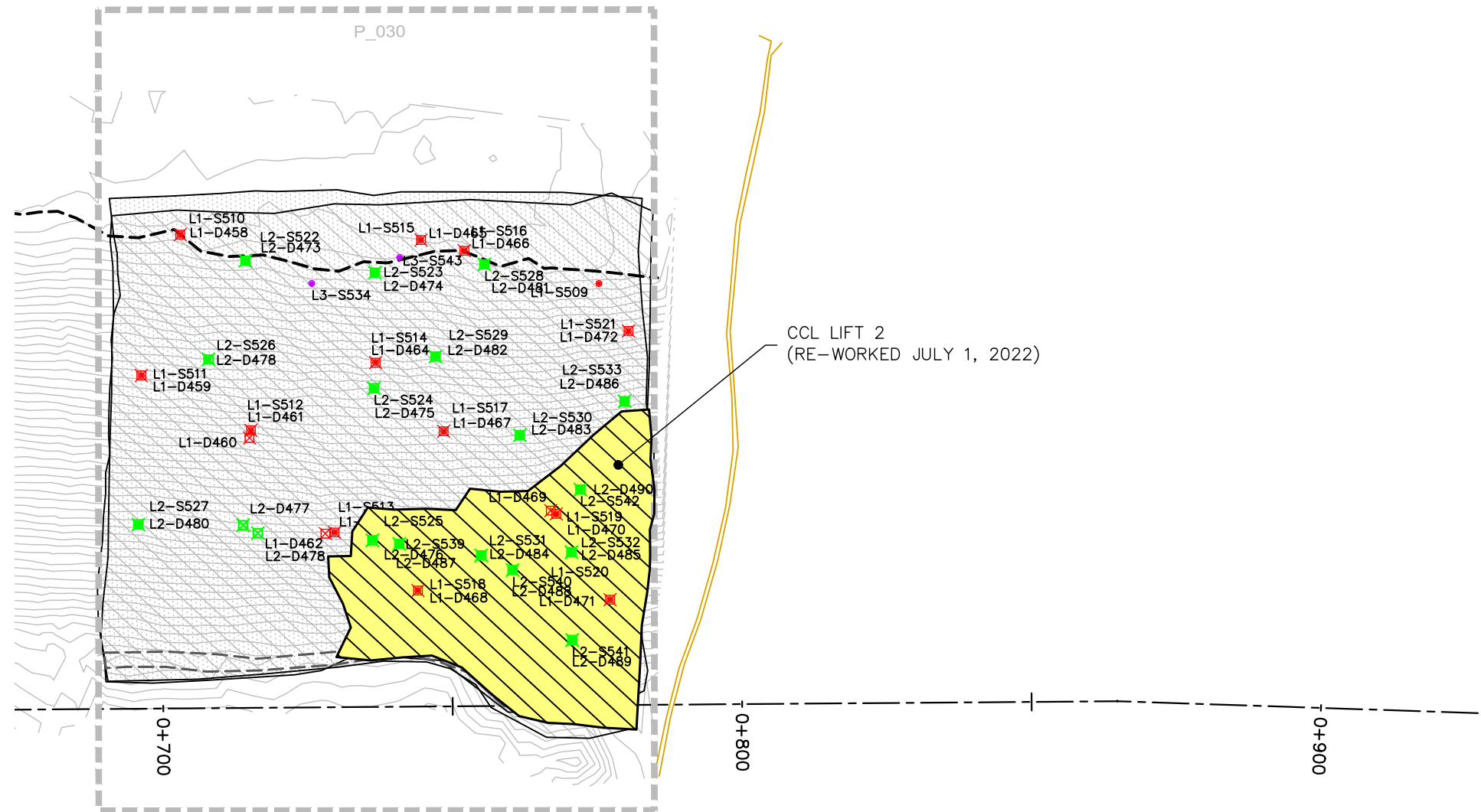
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 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(JULY 1, 2022) SCALE: 1:1000

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE JULY 1, 2022

DRAWN JTS

CHECKED

SCALE NTS

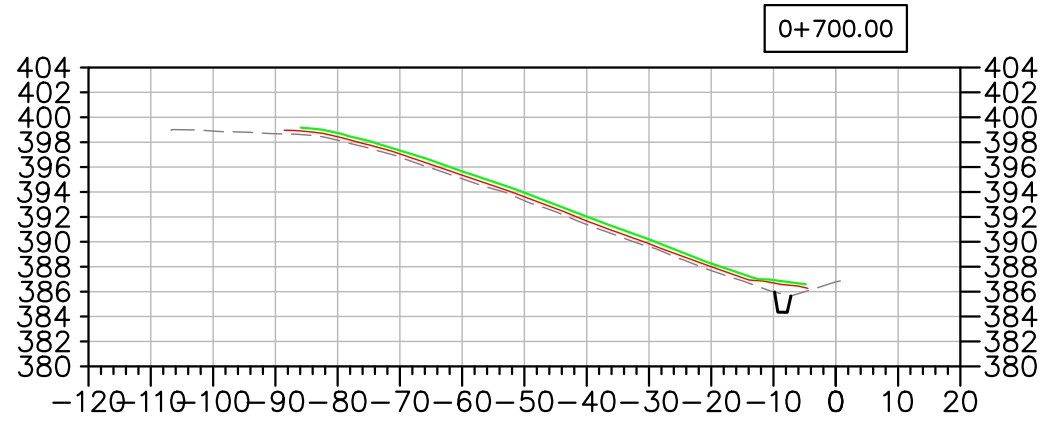
DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 1, 2022
DRAWN JTS
CHECKED
SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 | 19-1138 | 119

EMRS RECLAMATION – DAILY PROGRESS
(JULY 1, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 2, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED JULY 2, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED JULY 2, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JULY 2, 2022 = 3,595m³
 PLACED TO DATE = 3,595m³

NCL LIFT 4

PLACED JULY 2, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

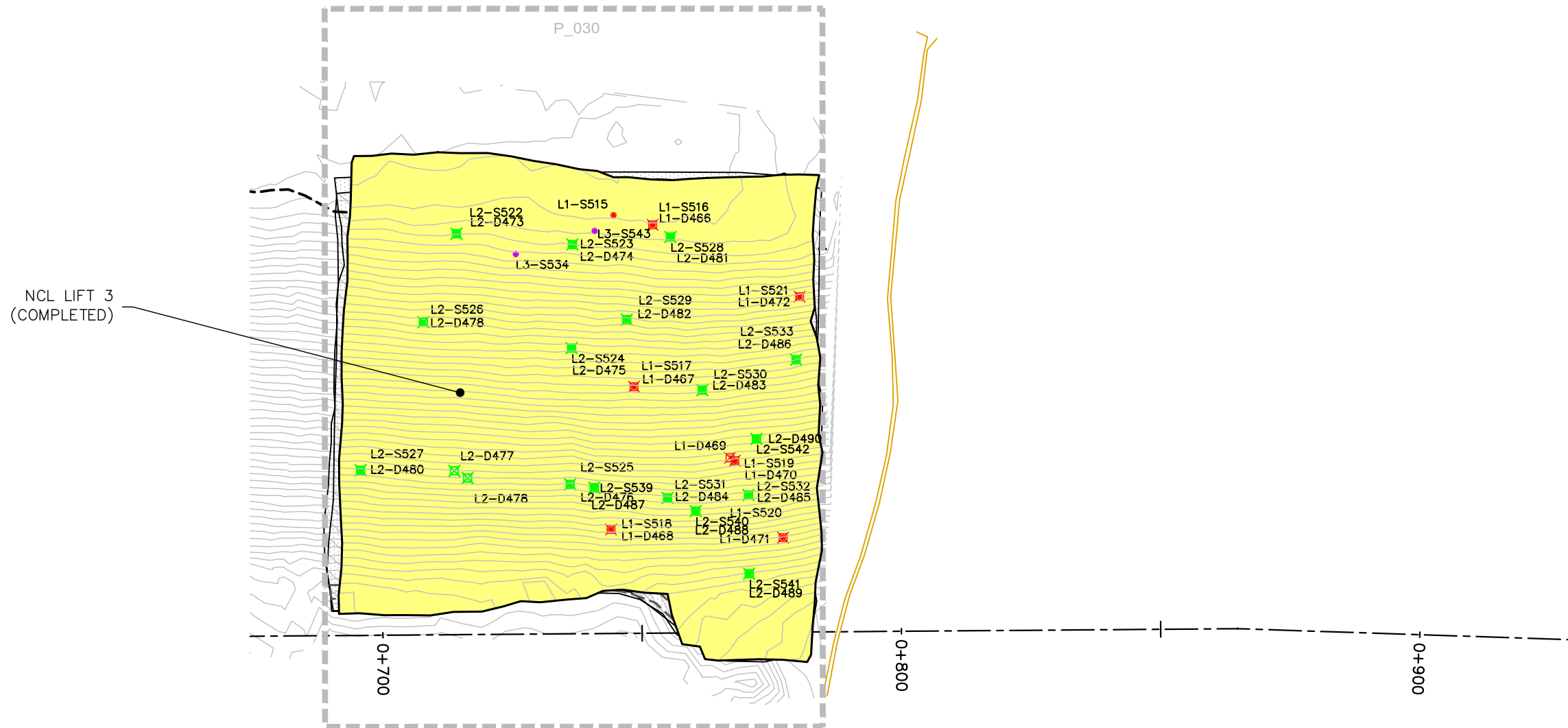
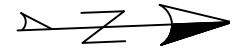
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 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(JULY 2, 2022) SCALE: 1:1000

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE JULY 2, 2022

DRAWN JTS

CHECKED

SCALE NTS

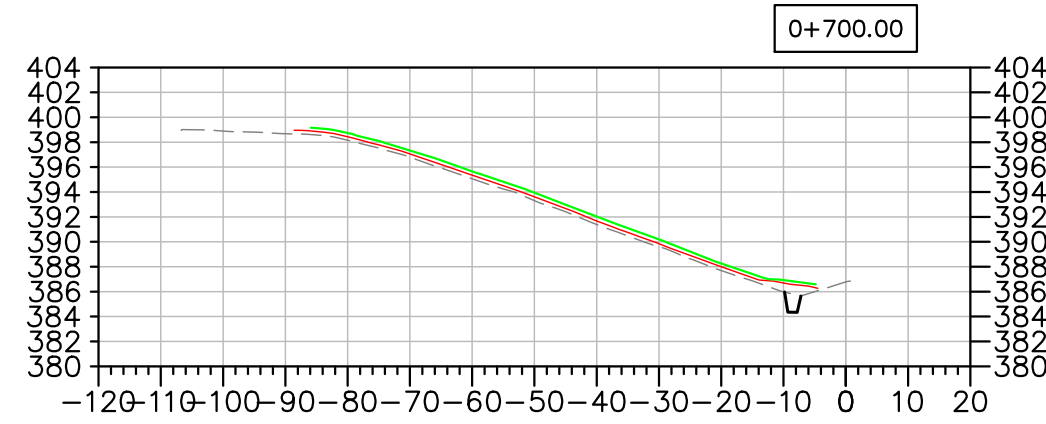
DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 2, 2022
DRAWN JTS
CHECKED
SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 | 19-1138 | 119

EMRS RECLAMATION – DAILY PROGRESS
(JULY 2, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 3, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED JULY 3, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED JULY 3, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JULY 3, 2022 = 0m³
 PLACED TO DATE = 3,595m³

NCL LIFT 4

PLACED JULY 3, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

CCL COMPLETED TO DATE = 0.7913 ha
 NCL COMPLETED TO DATE = 0 ha

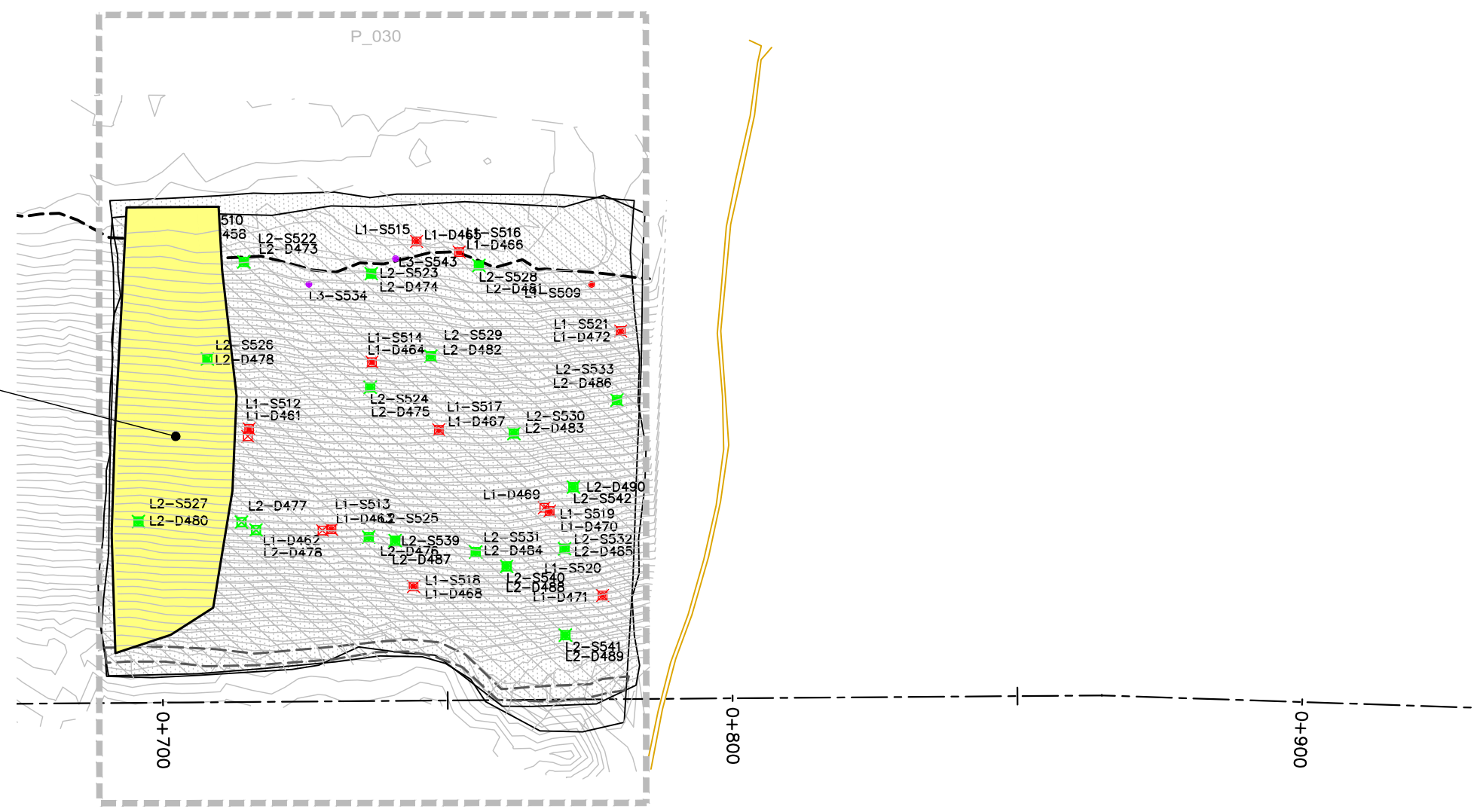
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 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	

NCL LIFT 4
(IN PROGRESS)



EMRS RECLAMATION – DAILY PROGRESS

(JULY 3, 2022) SCALE: 1:1000

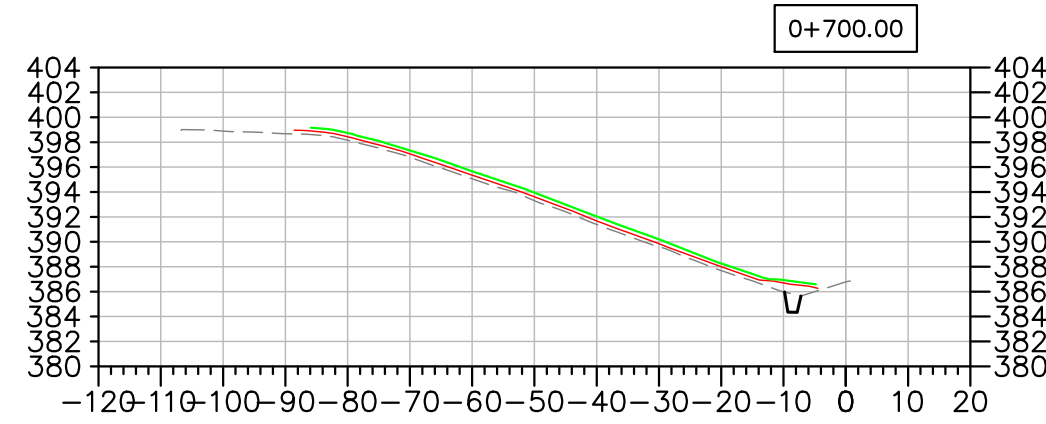
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	JULY 3, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 3, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
X-1	19-1138	119

EMRS RECLAMATION – DAILY PROGRESS
(JULY 3, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 4, 2022 = 0m³
 EXCAVATED TO DATE = 347m³

CCL LIFT 1

PLACED JULY 4, 2022 = 0m³
 PLACED TO DATE = 2,379m³

CCL LIFT 2

PLACED JULY 4, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JULY 4, 2022 = 0m³
 PLACED TO DATE = 3,595m³

NCL LIFT 4

PLACED JULY 4, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

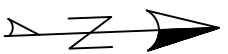
CCL COMPLETED TO DATE = 0.7913 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum: 1983 (NAD83)
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum: Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations

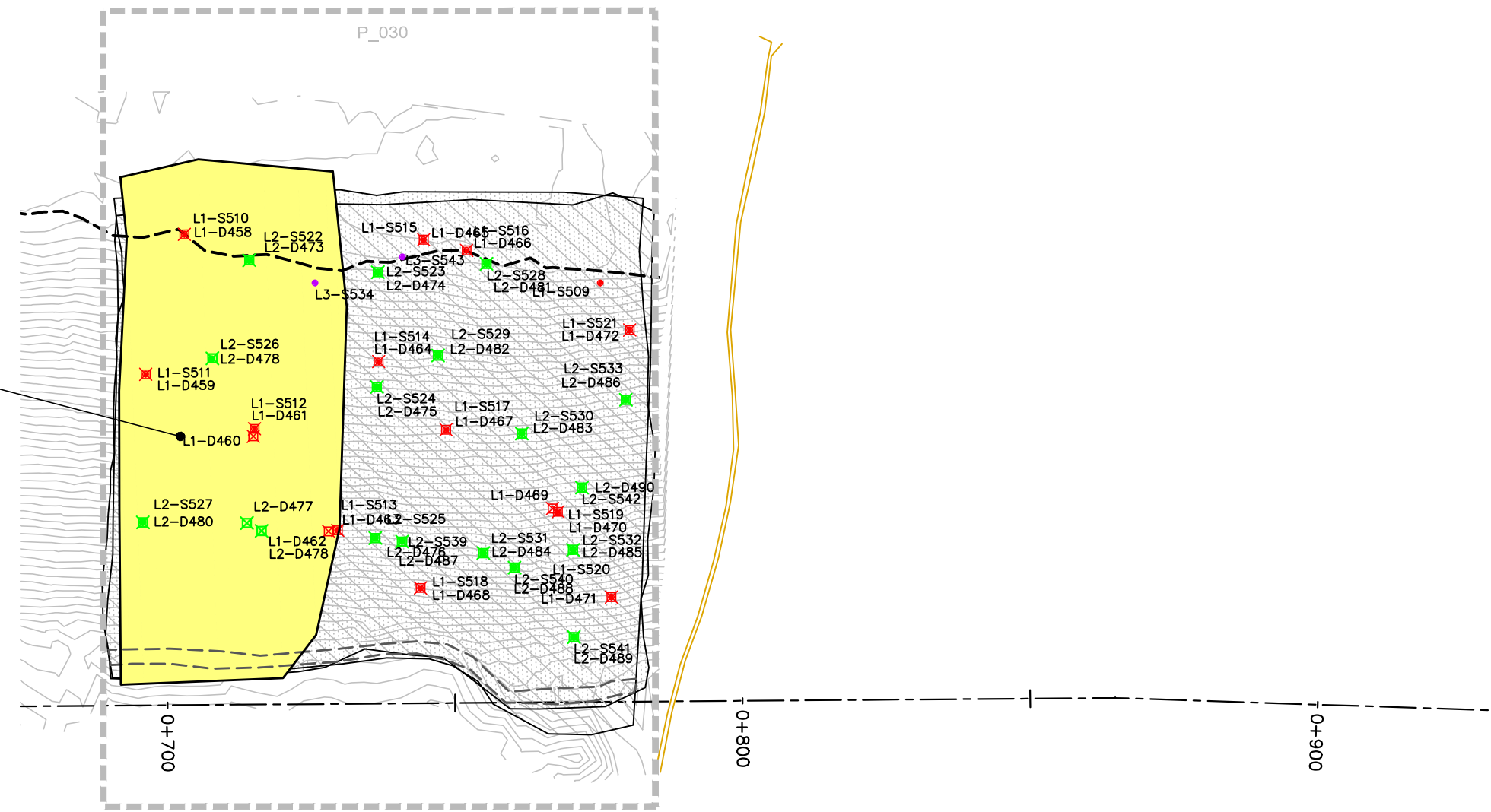


REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



NCL LIFT 4
(IN PROGRESS)



EMRS RECLAMATION — DAILY PROGRESS

(JULY 4, 2022) SCALE: 1:1000

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE JULY 4, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
 D-1 | 19-1138 | 119

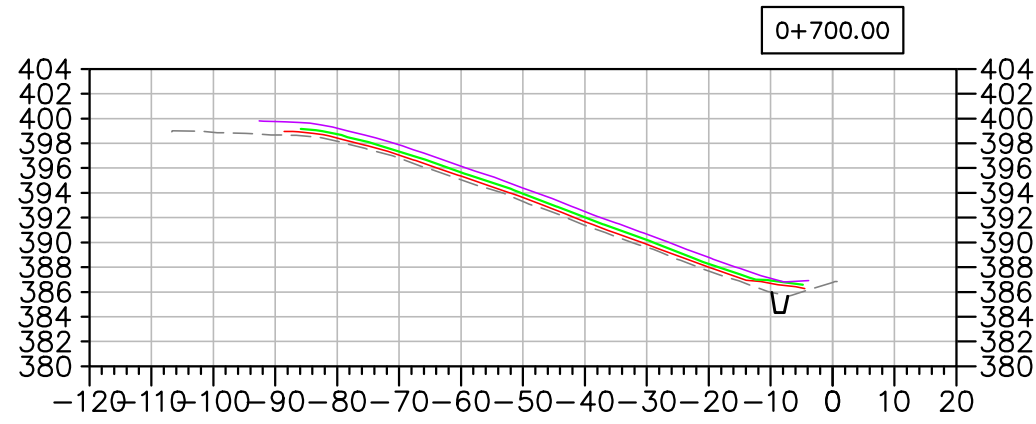
SHEET SIZE - 11' x 17'

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION CROSS
 SECTIONS

PURPOSE
 DAILY PROGRESS

DATE JULY 4, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
 X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS
 (JULY 4, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 5, 2022 = 118m³
 EXCAVATED TO DATE = 352m³

CCL LIFT 1

PLACED JULY 5, 2022 = 845m³
 PLACED TO DATE = 3,224m³

CCL LIFT 2

PLACED JULY 5, 2022 = 0m³
 PLACED TO DATE = 2,205m³

NCL LIFT 3

PLACED JULY 5, 2022 = 0m³
 PLACED TO DATE = 3,595m³

NCL LIFT 4

PLACED JULY 5, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

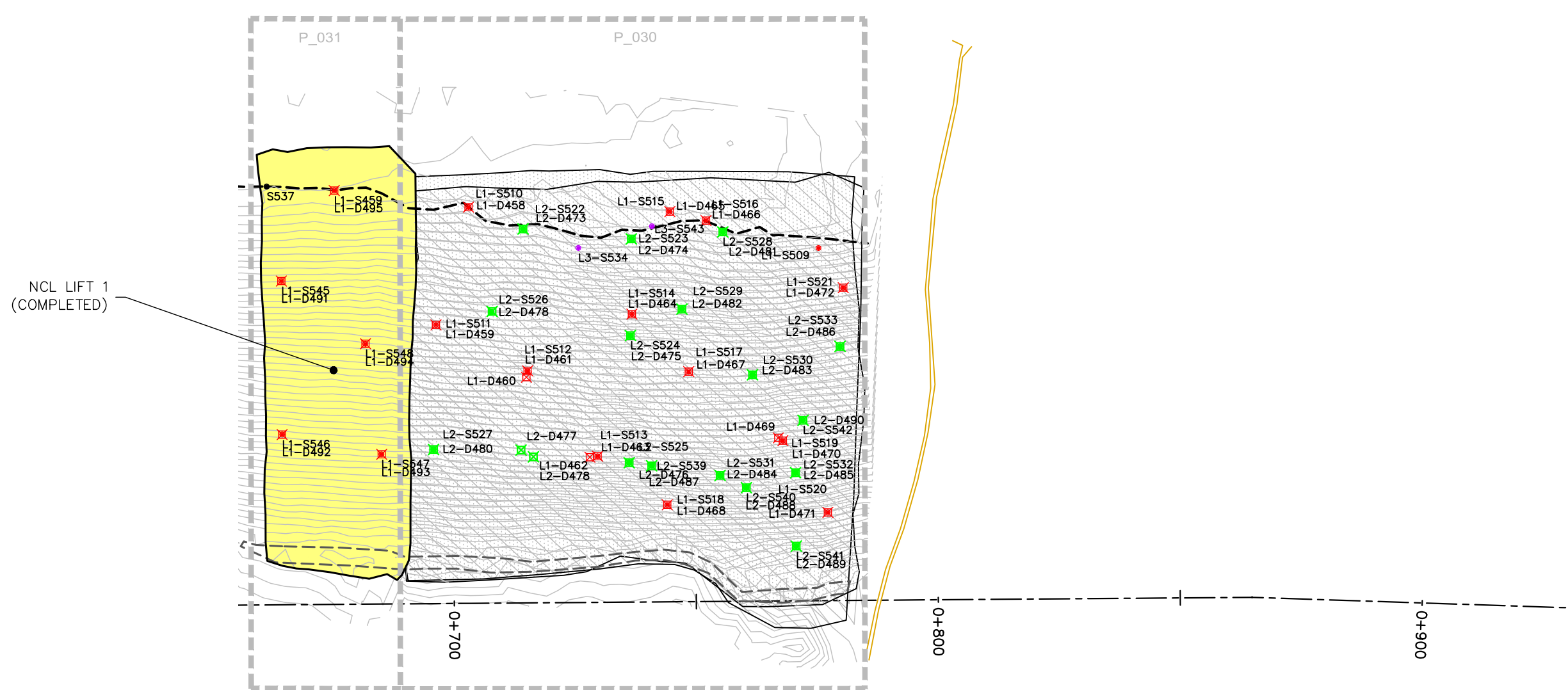
CCL COMPLETED TO DATE = 0.7913 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS
 (JULY 5, 2022) SCALE: 1:1000

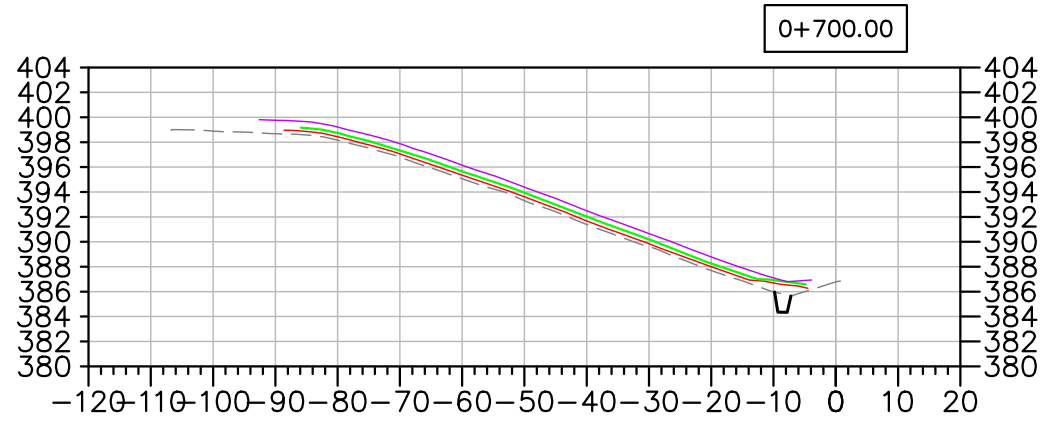
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	JULY 5, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 5, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.

X-1 | 19-1138 | 119

EMRS RECLAMATION – DAILY PROGRESS

(JULY 5, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 6, 2022 = 0m³
 EXCAVATED TO DATE = 352m³

CCL LIFT 1

PLACED JULY 6, 2022 = 0m³
 PLACED TO DATE = 3,224m³

CCL LIFT 2

PLACED JULY 6, 2022 = 613m³
 PLACED TO DATE = 2,818m³

NCL LIFT 3

PLACED JULY 6, 2022 = 0m³
 PLACED TO DATE = 3,595m³

NCL LIFT 4

PLACED JULY 6, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

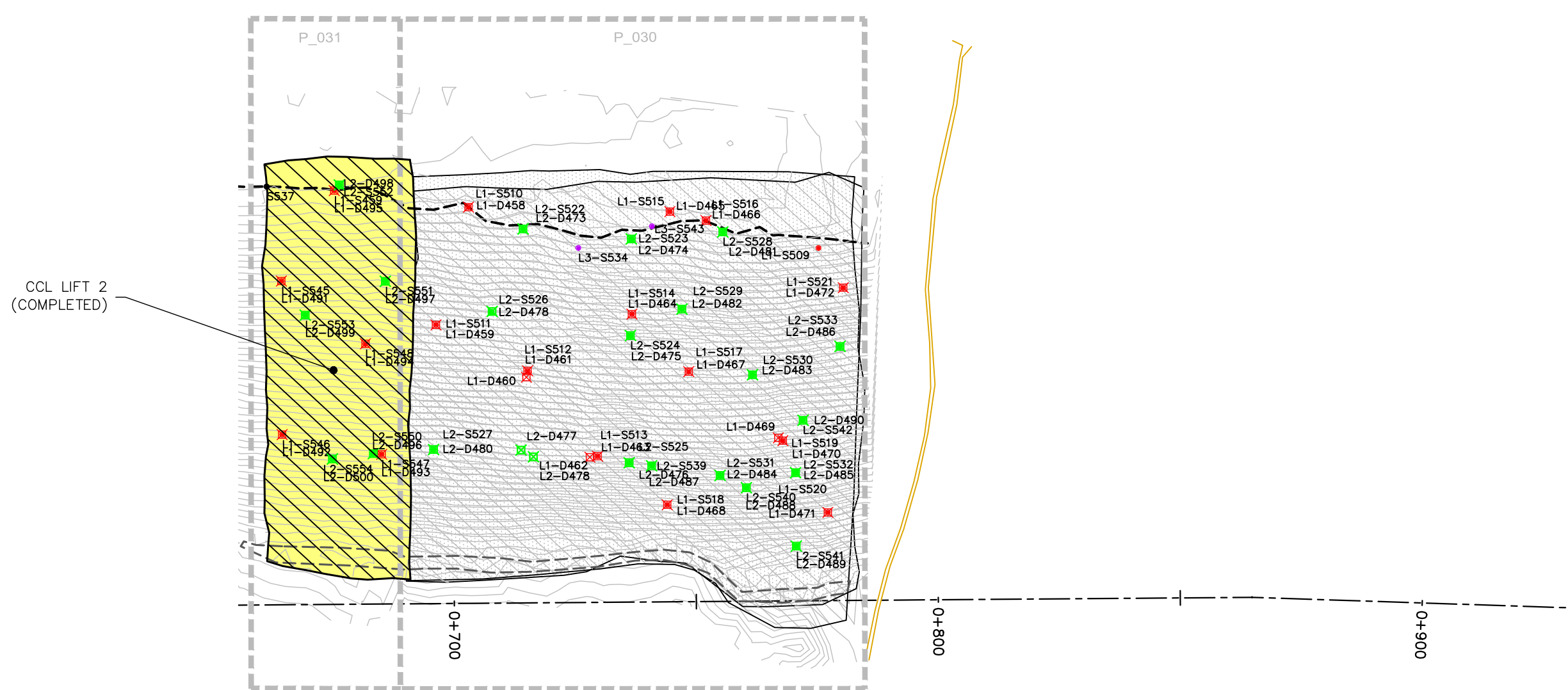
CCL COMPLETED TO DATE = 1.0506 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS
 (JULY 6, 2022) SCALE: 1:1000

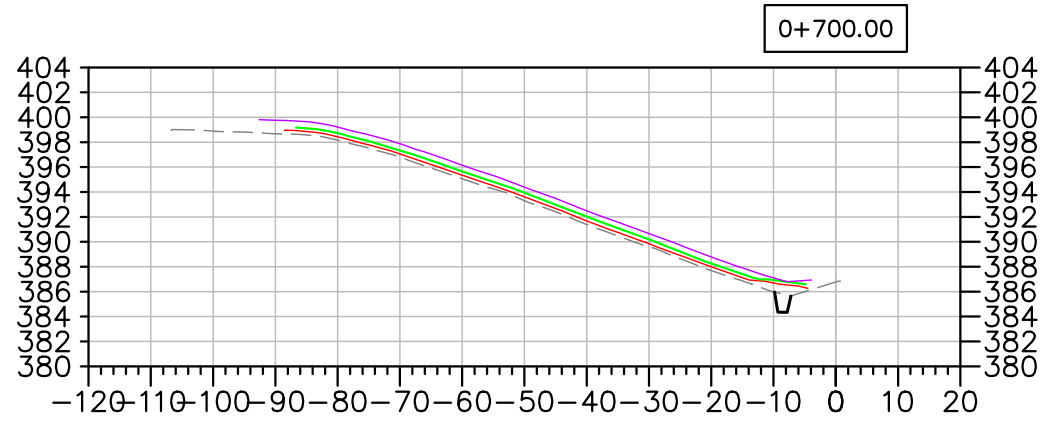
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	JULY 6, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 6, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.

X-1 | 19-1138 | 119

EMRS RECLAMATION – DAILY PROGRESS

(JULY 6, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 7, 2022 = 0m³
 EXCAVATED TO DATE = 352m³

CCL LIFT 1

PLACED JULY 7, 2022 = 0m³
 PLACED TO DATE = 3,224m³

CCL LIFT 2

PLACED JULY 7, 2022 = 0m³
 PLACED TO DATE = 2,818m³

NCL LIFT 3

PLACED JULY 7, 2022 = 0m³
 PLACED TO DATE = 3,595m³

NCL LIFT 4

PLACED JULY 7, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

CCL COMPLETED TO DATE = 1.0506 ha
 NCL COMPLETED TO DATE = 0 ha

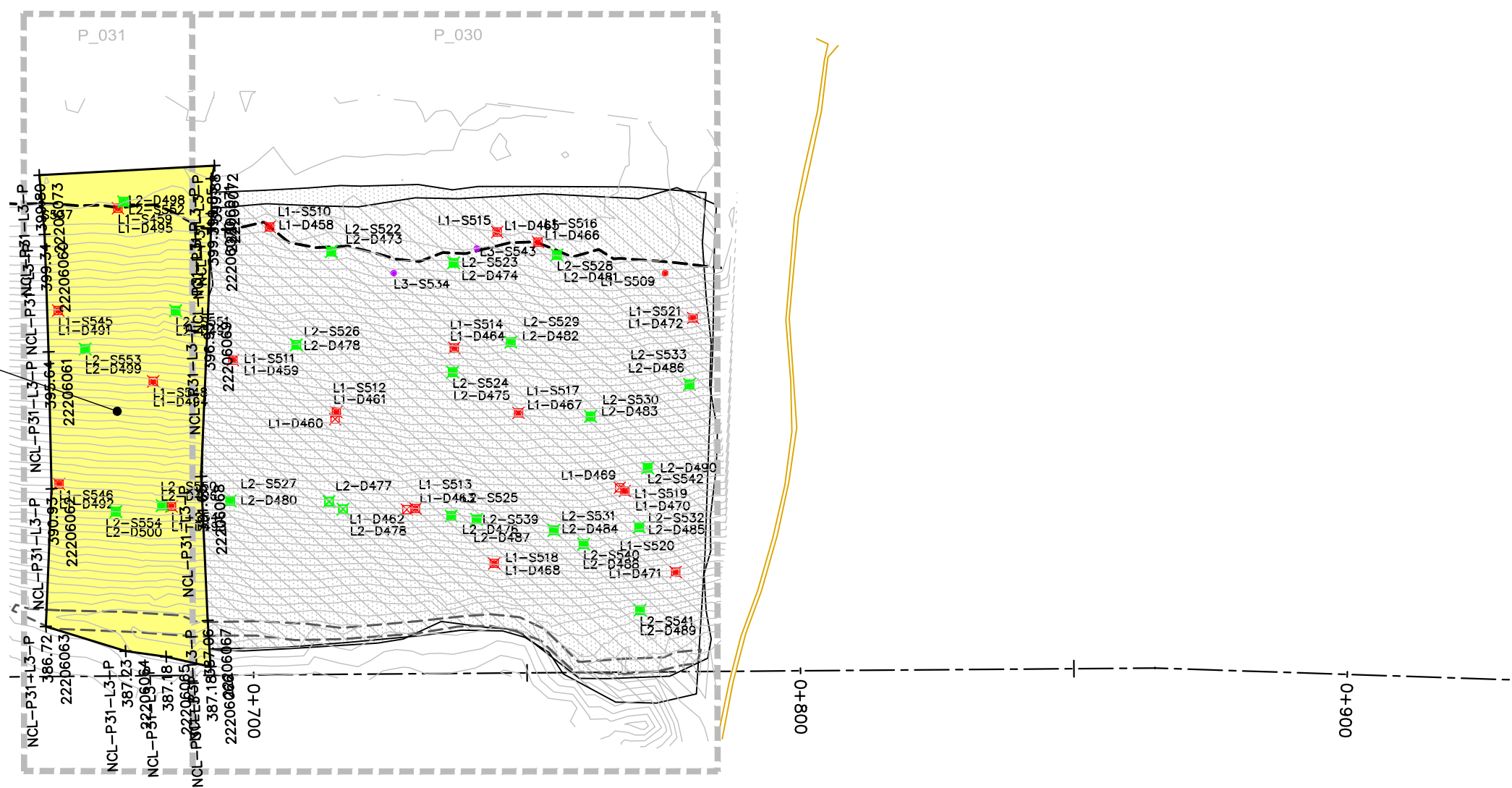
Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	

NCL LIFT 3
(IN PROGRESS)



EMRS RECLAMATION – DAILY PROGRESS

(JULY 7, 2022) SCALE: 1:1000

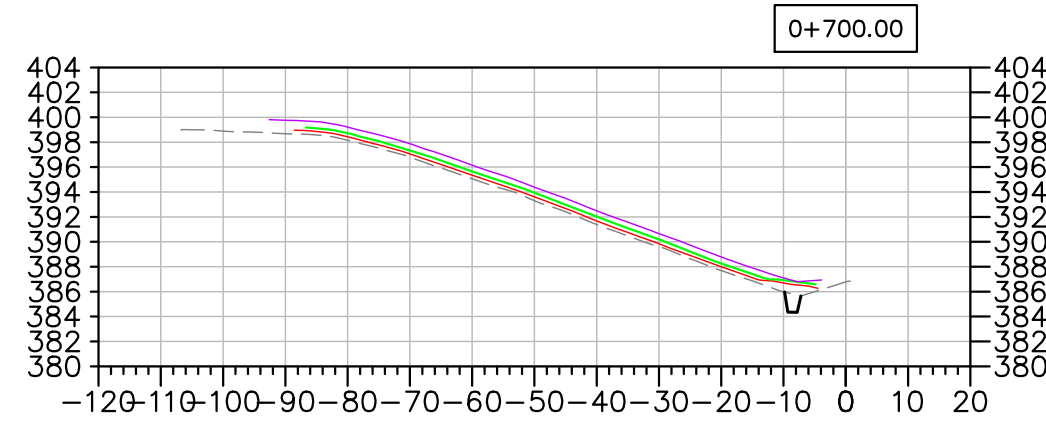
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	JULY 7, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 7, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
X-1	19-1138	119

EMRS RECLAMATION – DAILY PROGRESS
(JULY 7, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 8, 2022 = 0m³
 EXCAVATED TO DATE = 352m³

CCL LIFT 1

PLACED JULY 8, 2022 = 0m³
 PLACED TO DATE = 3,224m³

CCL LIFT 2

PLACED JULY 8, 2022 = 0m³
 PLACED TO DATE = 2,818m³

NCL LIFT 3

PLACED JULY 8, 2022 = 1,318m³
 PLACED TO DATE = 4,913m³

NCL LIFT 4

PLACED JULY 8, 2022 = 0m³
 PLACED TO DATE = 0m³

AREA COMPLETED

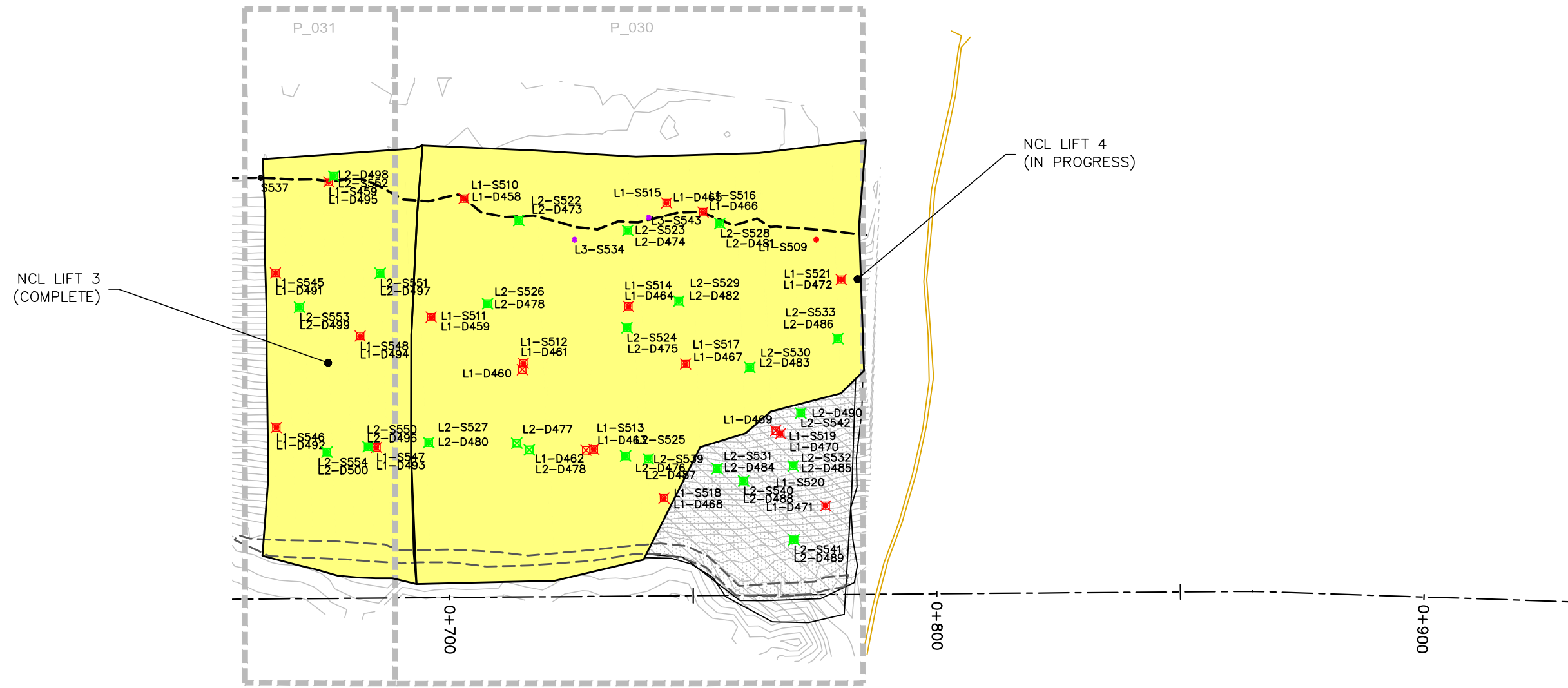
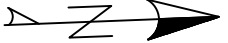
CCL COMPLETED TO DATE = 1.0506 ha
 NCL COMPLETED TO DATE = 0 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION — DAILY PROGRESS
 (JULY 8, 2022) SCALE: 1:1000

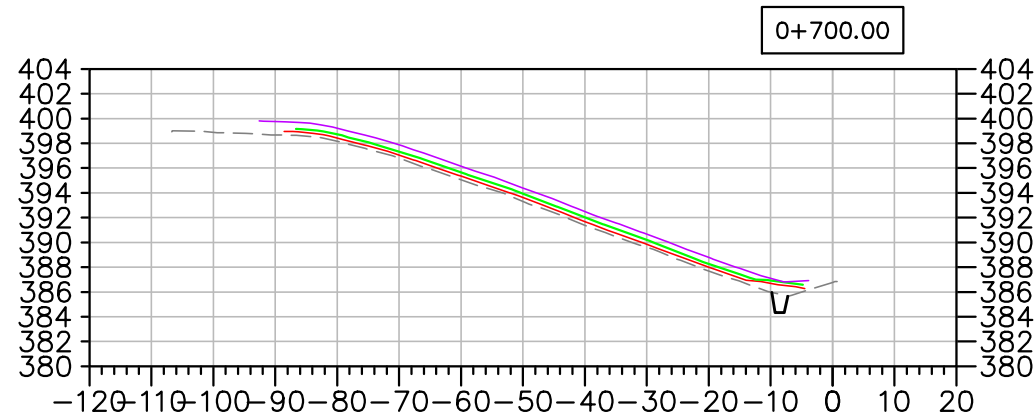
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	JULY 8, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 8, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 19-1138 119

EMRS RECLAMATION – DAILY PROGRESS

(JULY 8, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 9, 2022 = 0m³
 EXCAVATED TO DATE = 352m³

CCL LIFT 1

PLACED JULY 9, 2022 = 0m³
 PLACED TO DATE = 3,224m³

CCL LIFT 2

PLACED JULY 9, 2022 = 0m³
 PLACED TO DATE = 2,818m³

NCL LIFT 3

PLACED JULY 9, 2022 = 0m³
 PLACED TO DATE = 4,913m³

NCL LIFT 4

PLACED JULY 9, 2022 = 3,744m³
 PLACED TO DATE = 3,744m³

AREA COMPLETED

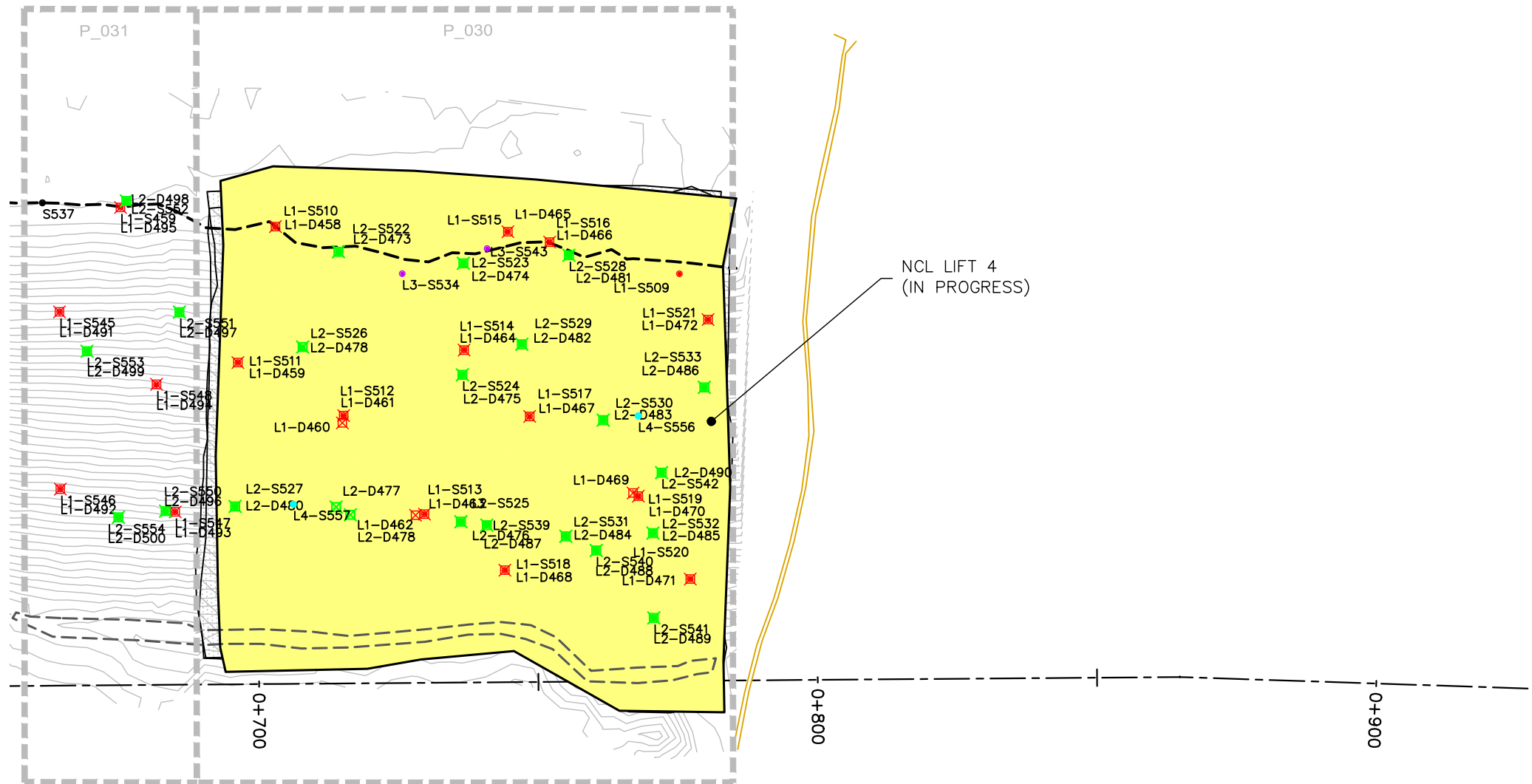
CCL COMPLETED TO DATE = 1.0506 ha
 NCL COMPLETED TO DATE = 0.0 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS

(JULY 9, 2022) SCALE: 1:1000

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE JULY 9, 2022

DRAWN JTS

CHECKED

SCALE NTS

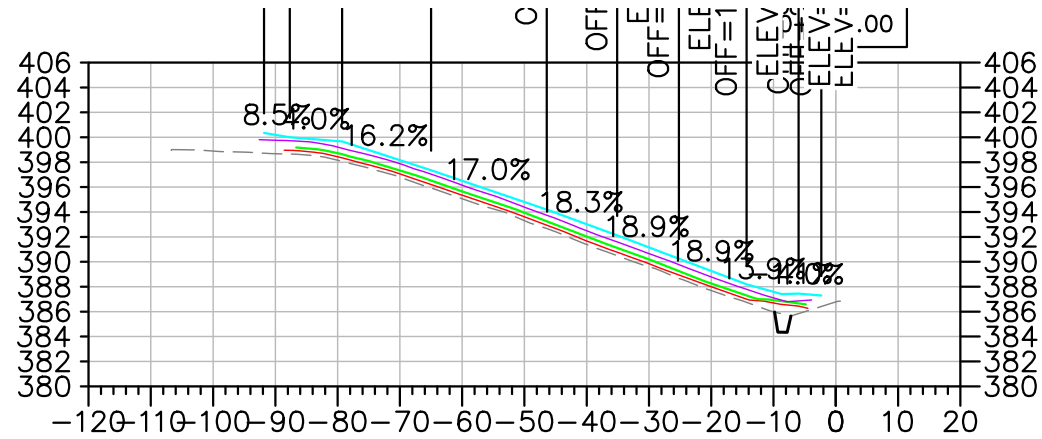
DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 9, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 | 19-1138 | 119

EMRS RECLAMATION – DAILY PROGRESS

(JULY 9, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 10, 2022 = 0m³
 EXCAVATED TO DATE = 352m³

CCL LIFT 1

PLACED JULY 10, 2022 = 0m³
 PLACED TO DATE = 3,224m³

CCL LIFT 2

PLACED JULY 10, 2022 = 0m³
 PLACED TO DATE = 2,818m³

NCL LIFT 3

PLACED JULY 10, 2022 = 0m³
 PLACED TO DATE = 4,913m³

NCL LIFT 4

PLACED JULY 10, 2022 = 649m³
 PLACED TO DATE = 4,393m³

AREA COMPLETED

CCL COMPLETED TO DATE = 1.0506 ha
 NCL COMPLETED TO DATE = 0.8037 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations

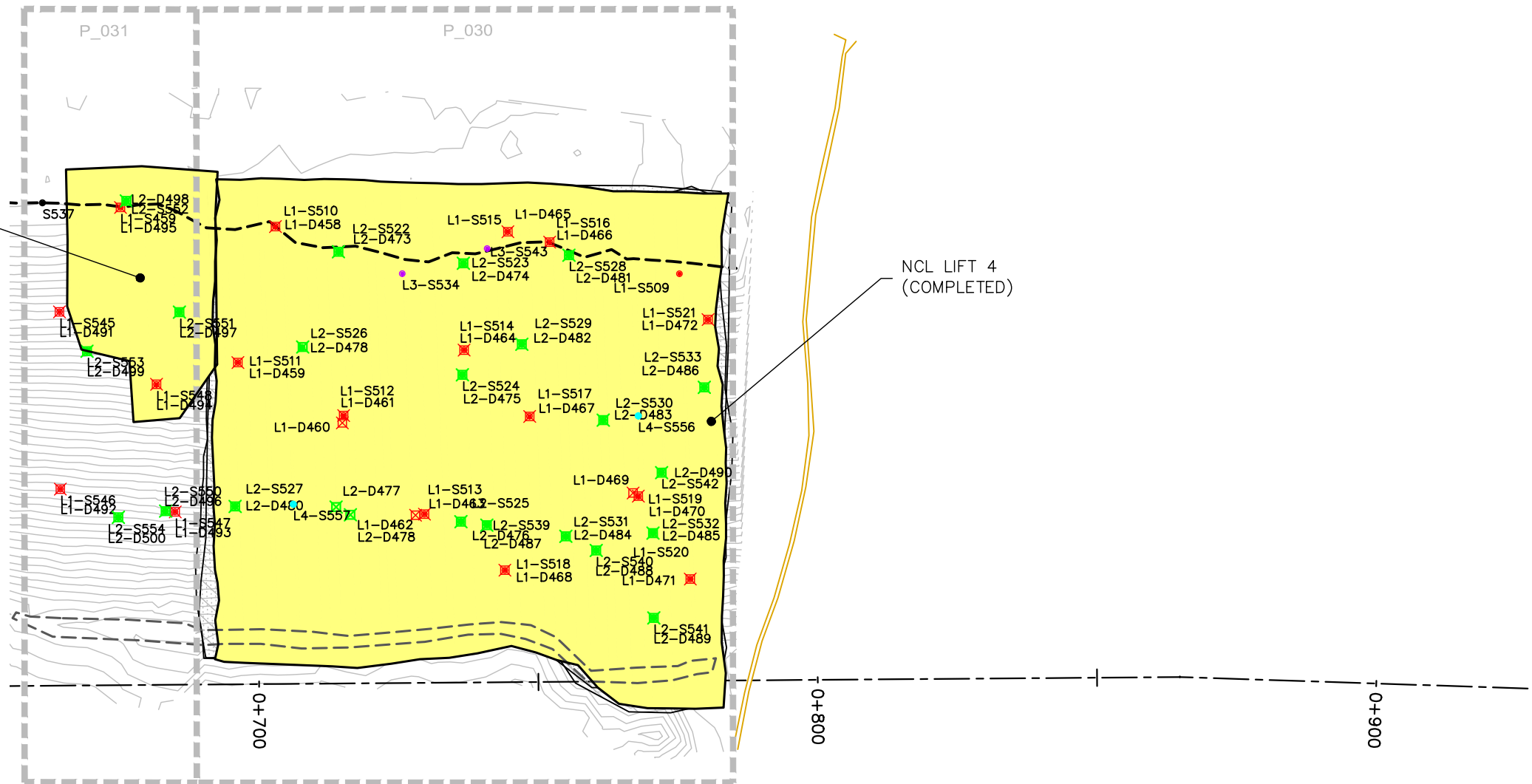


REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	

NCL LIFT 4
(IN PROGRESS)

NCL LIFT 4
(COMPLETED)



EMRS RECLAMATION – DAILY PROGRESS

(JULY 10, 2022) SCALE: 1:1000

PROJECT TITLE
 NEW GOLD INC
 RAINY RIVER
 PROJECT

DRAWING TITLE
 2022 EMRS
 RECLAMATION

PURPOSE
 DAILY PROGRESS

DATE JULY 10, 2022

DRAWN JTS

CHECKED

SCALE NTS

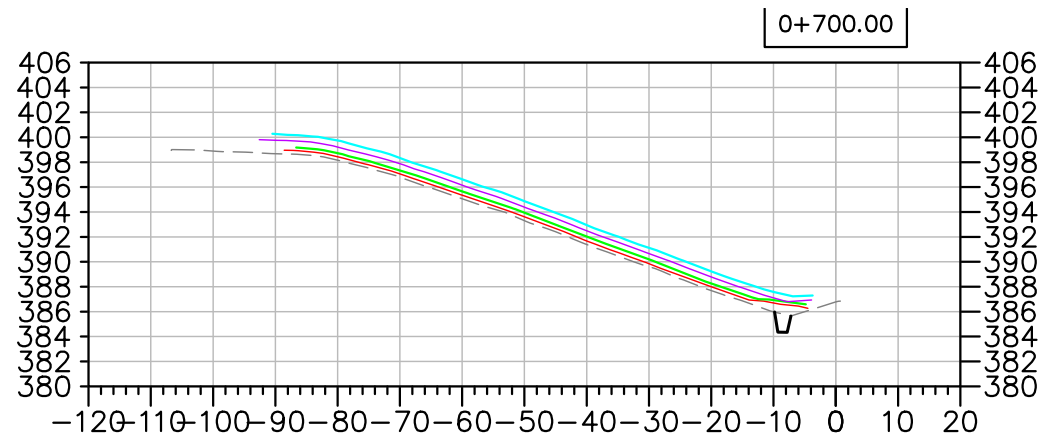
DWG. No. PROJECT No. PHASE No.
 D-1 19-1138 119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 10, 2022
DRAWN JTS
CHECKED
SCALE NTS

DWG. No. PROJECT No. PHASE No.
X-1 | 19-1138 | 119

EMRS RECLAMATION – DAILY PROGRESS
(JULY 10, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 13, 2022 = 65m³
 EXCAVATED TO DATE = 417m³

CCL LIFT 1

PLACED JULY 13, 2022 = 701m³
 PLACED TO DATE = 3,925m³

CCL LIFT 2

PLACED JULY 13, 2022 = 0m³
 PLACED TO DATE = 2,818m³

NCL LIFT 3

PLACED JULY 13, 2022 = 0m³
 PLACED TO DATE = 4,913m³

NCL LIFT 4

PLACED JULY 13, 2022 = 237m³
 PLACED TO DATE = 4,630m³

AREA COMPLETED

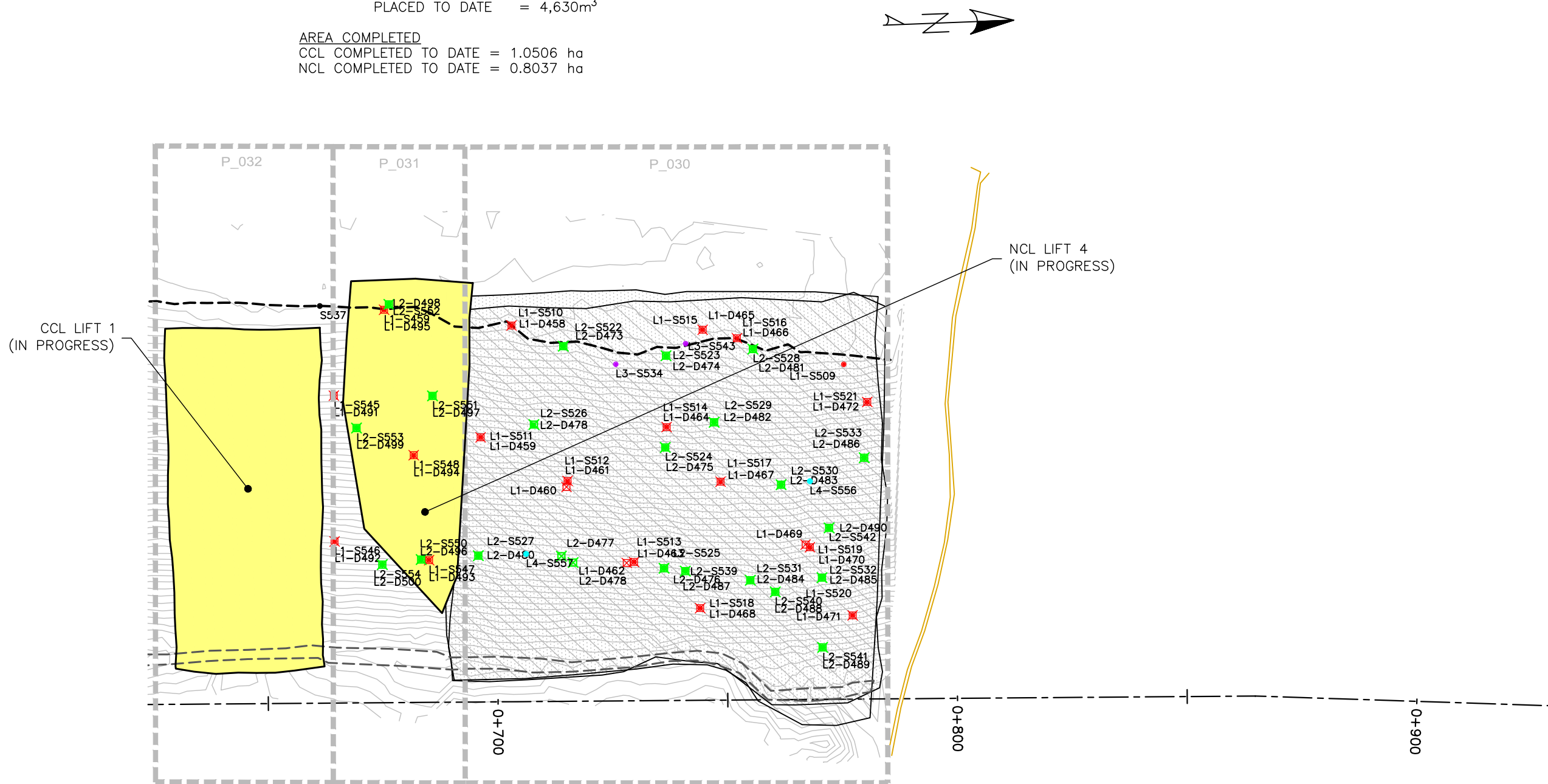
CCL COMPLETED TO DATE = 1.0506 ha
 NCL COMPLETED TO DATE = 0.8037 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS
 (JULY 13, 2022) SCALE: 1:1000

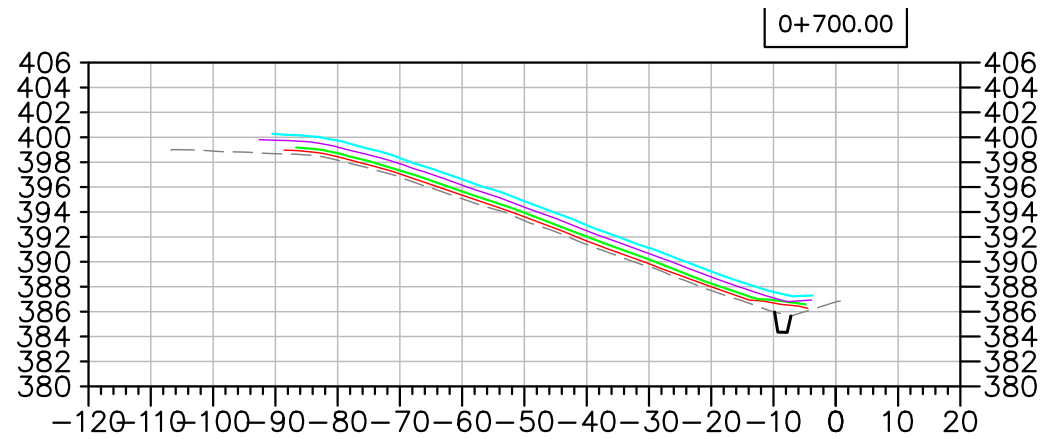
PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	JULY 13, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119

REVISIONS

DATE	REMARKS

LEGEND

- EXISTING ROCK STOCKPILE ---
- CCL LIFT #1 —
- CCL LIFT #2 —
- NCL LIFT #3 —
- NCL LIFT #4 —
- KEY TRENCH —



Horizontal Datum:
North American Datum 1983 (NAD83)
6 Degree Universal Transverse Mercator
(UTM) Grid Coordinates, Zone 15.
Vertical Datum:
Canadian Geodetic Vertical Datum,
1928 Adjustment, Geodetic Elevations

PROJECT TITLE
NEW GOLD INC
RAINY RIVER
PROJECT

DRAWING TITLE
2022 EMRS
RECLAMATION CROSS
SECTIONS

PURPOSE
DAILY PROGRESS

DATE JULY 13, 2022

DRAWN JTS

CHECKED

SCALE NTS

DWG. No.	PROJECT No.	PHASE No.
X-1	19-1138	119

EMRS RECLAMATION – DAILY PROGRESS

(JULY 13, 2022) SCALE: N.T.S.

EMRS RECLAMATION

KEY TRENCH EXCAVATION

EXCAVATED JULY 14, 2022 = 0m³
 EXCAVATED TO DATE = 417m³

CCL LIFT 1

PLACED JULY 14, 2022 = 110m³
 PLACED TO DATE = 4,035m³

CCL LIFT 2

PLACED JULY 14, 2022 = 611m³
 PLACED TO DATE = 3,429m³

NCL LIFT 3

PLACED JULY 14, 2022 = 0m³
 PLACED TO DATE = 4,913m³

NCL LIFT 4

PLACED JULY 14, 2022 = 307m³
 PLACED TO DATE = 4,937m³

AREA COMPLETED

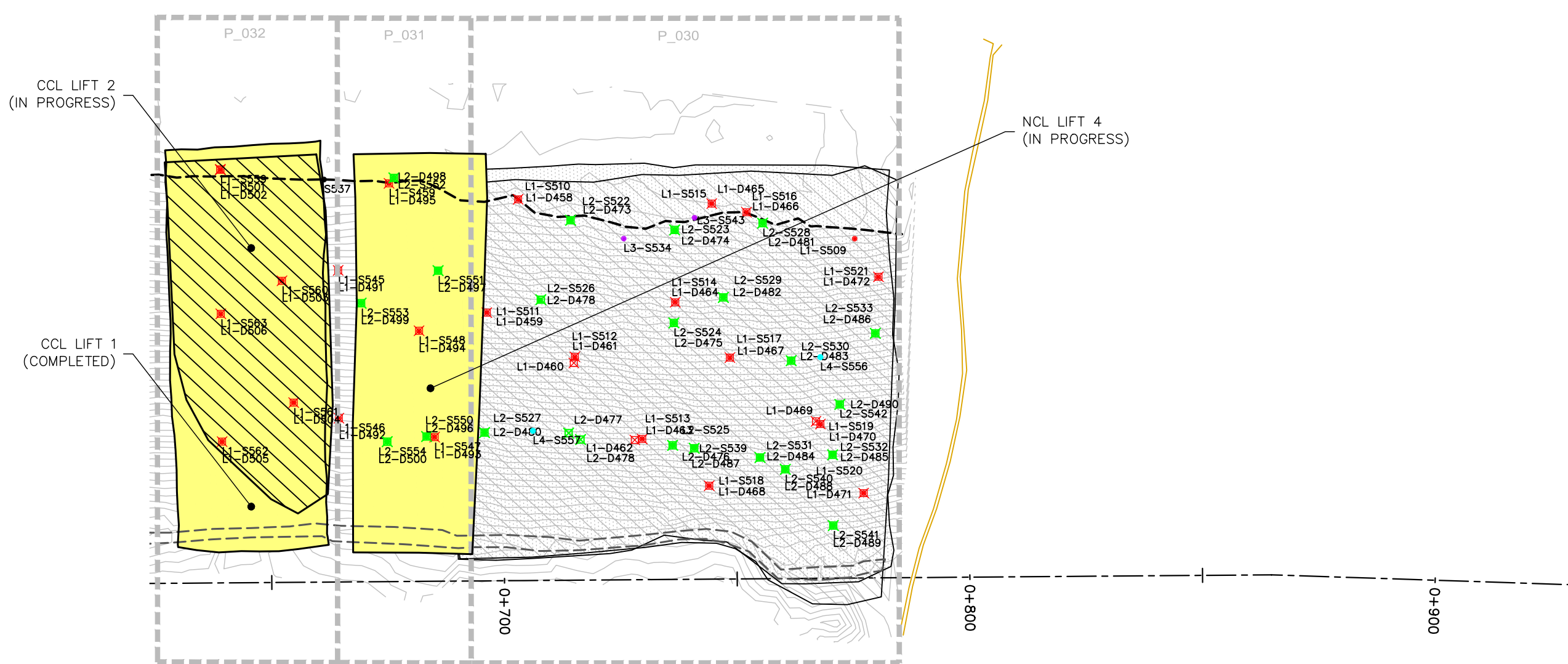
CCL COMPLETED TO DATE = 1.0506 ha
 NCL COMPLETED TO DATE = 0.8037 ha

Horizontal Datum:
 North American Datum 1983 (NAD83)
 6 Degree Universal Transverse Mercator
 (UTM) Grid Coordinates, Zone 15.
 Vertical Datum:
 Canadian Geodetic Vertical Datum,
 1928 Adjustment, Geodetic Elevations



REVISIONS	
DATE	REMARKS

LEGEND	
CCL LIFT #1	
CCL LIFT #2	
NCL LIFT #3	
NCL LIFT #4	
KEY TRENCH	
LIFT #1 COMP. TEST SAMPLE	
LIFT #2 COMP. TEST SAMPLE	
LIFT #3 COMP. TEST SAMPLE	
LIFT #4 COMP. TEST SAMPLE	
VWP WIRE	
VWP WIRE BURRITO	
PLACED TODAY	
CCL LIFT 2 PLACED TODAY	



EMRS RECLAMATION – DAILY PROGRESS
 (JULY 14, 2022) SCALE: 1:1000

PROJECT TITLE		
NEW GOLD INC RAINY RIVER PROJECT		
DRAWING TITLE		
2022 EMRS RECLAMATION		
PURPOSE		
DAILY PROGRESS		
DATE	JULY 14, 2022	
DRAWN	JTS	
CHECKED		
SCALE	NTS	
DWG. No.	PROJECT No.	PHASE No.
D-1	19-1138	119