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WORK PLAN FOR EXCAVATION OF CONTAMINATED SOIL AT UNDERGROUND STORAGE
TANK 7 NS MAYPORT FL
2/1/2006
TN & ASSOCIATES

WORK PLAN
EXCAVATION OF CONTAMINATED SOIL
AT UST 7
NS MAYPORT, FLORIDA
N62467-02-D-0483/013



Prepared for:

**Naval Facilities Engineering Command
Southern Division
Charleston, South Carolina**

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LIST OF ATTACHMENTS AND APPENDICES

(Note that Appendices are noted only and will be incorporated with the Final Work Plan)

ATTACHMENT 1 – Schedule

Each APPENDIX has been sent under separate Transmittal for separate review and final incorporation as a single unit Work Plan

- APPENDIX A – Sampling and Analysis Plan
- APPENDIX B – Quality Control Plan
- APPENDIX C – Health and Safety Plan
- APPENDIX D – Waste Management Plan
- APPENDIX E – Stormwater Pollution Prevention Plan

LIST OF ACRONYMS

DO	delivery order
FDEP	Florida Department of Environmental Protection
HASP	health and safety plan
NS	Naval Station
QAPP	quality assurance project plan
QCP	quality control plan
RAWP	remedial action work plan
SAP	sampling and analysis plan
SOW	Statement of Work
SWPPP	stormwater pollution prevention plan
TCL	target compound list
TN&A	T N & Associate, Inc.
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
WMP	waste management plan
WP	Work Plan

1.0 INTRODUCTION

This work plan for the excavation and disposal of petroleum, oil and lubricant contaminated soils associated with former Underground Storage Tank (UST) 7 located at Site 283, Naval Station (NS) Mayport, Florida and final restoration of the site. Duration of work will not exceed 477 calendar days from the date of award without contract modification.

The area to be remediated is bounded by chain link fence and is readily assessable to equipment and trucks. Portions of the site are grass vegetated or crushed lime-rock parking areas. The primary objective of this project is to remediate all contaminated soils associated with the former Underground Storage Tank.

Safe project execution with **Zero lost time injuries or accidents** Nationwide on 4 different Navy Environmental Multiple Award Contracts is a part of each and every T N & Associates, Inc. (TN&A) project.

Appendices have been submitted under separate Transmittals for individual unit reviews.

1.1 General

The Southern Division, Naval Facilities Engineering Command has Contract N62467-02-D-0483 - Delivery Order 013 award to TN&A to provide the services necessary for Remedial Action (Contaminated Soil Removal) at the UST 7 located at Site 283 located at NS Mayport, Florida under Solicitation N62467-05-R-X030-F.

1.2 Scope

This Work Plan presents proposed services for removal and disposal of contaminated soils and site restoration activities at NS Mayport, Florida. The primary objective of this project will consist of excavation, transport, and offsite disposal of approximately one hundred and sixty seven (167) cubic yards of contaminated soils, backfill to pre-excavation grades with certified clean materials, and restoration of disturbed areas. Contaminates of are primarily polyaromatic hydrocarbons with all soils assumed to be non-hazardous at this time. Additional O&M activities will include the quarterly sampling of the monitoring well adjacent to the area of excavation for a total of four cycles. The first monitoring well sampling event will be conducted following the completion of the excavation and restoration activities. The monitoring well sampling parameters will include Gasoline Analytical Group and Kerosene Analytical Group analytical groups. Duration of work will not exceed 477 calendar days from the date of award without contract modification.

The excavation area is currently covered with a mix of crushed aggregate and grasses. The designated excavation area has been established by previous investigations and will be marked in the field by others prior to or at time of mobilization.

This proposal describes the proposed services for the work elements contained in the Statement of Work (SOW) #0030-F provided on 11 August 2005 and subsequent Amendment 001. This technical proposal includes the following tasks:

TECHNICAL ACTIVITIES

Task 1.0 - Meetings: Post-Award Kickoff Meeting, Work Plan Design Review Meeting, Pre-Construction Meeting, Project Team/Production Meeting, and all other meetings called for during the execution of the CTO.

Task 2.0 - Work Plan Design Submittals: a Work Plan [WP] which will include a Traffic Control Plan [TCP] description, a Health and Safety Plan [HASp], a Sampling Analysis Plan with Quality

Assurance Project Plan [SAP/QAPP], a Conformity Analysis per Clean Air Act [CA], a Storm Water Pollution Prevention Plan [SWPPP], a Waste Management Plan [WMP] and a Quality Control Plan [QCP] will be developed and submitted specific to this CTO.

Task 3.0 - Field Effort: Notice-to-Proceed, Mobilization, Temporary Facilities, Utility Clearance, Temporary Environmental Controls, Site Work, Site Cleanup, and Demobilization.

Task 4.0 - Project Completion Reports: Draft and Final Reports for Surveys, Abatement, and Field Activities. Photo documentation depicting before, during, and after views of field activities will be incorporated with reports.

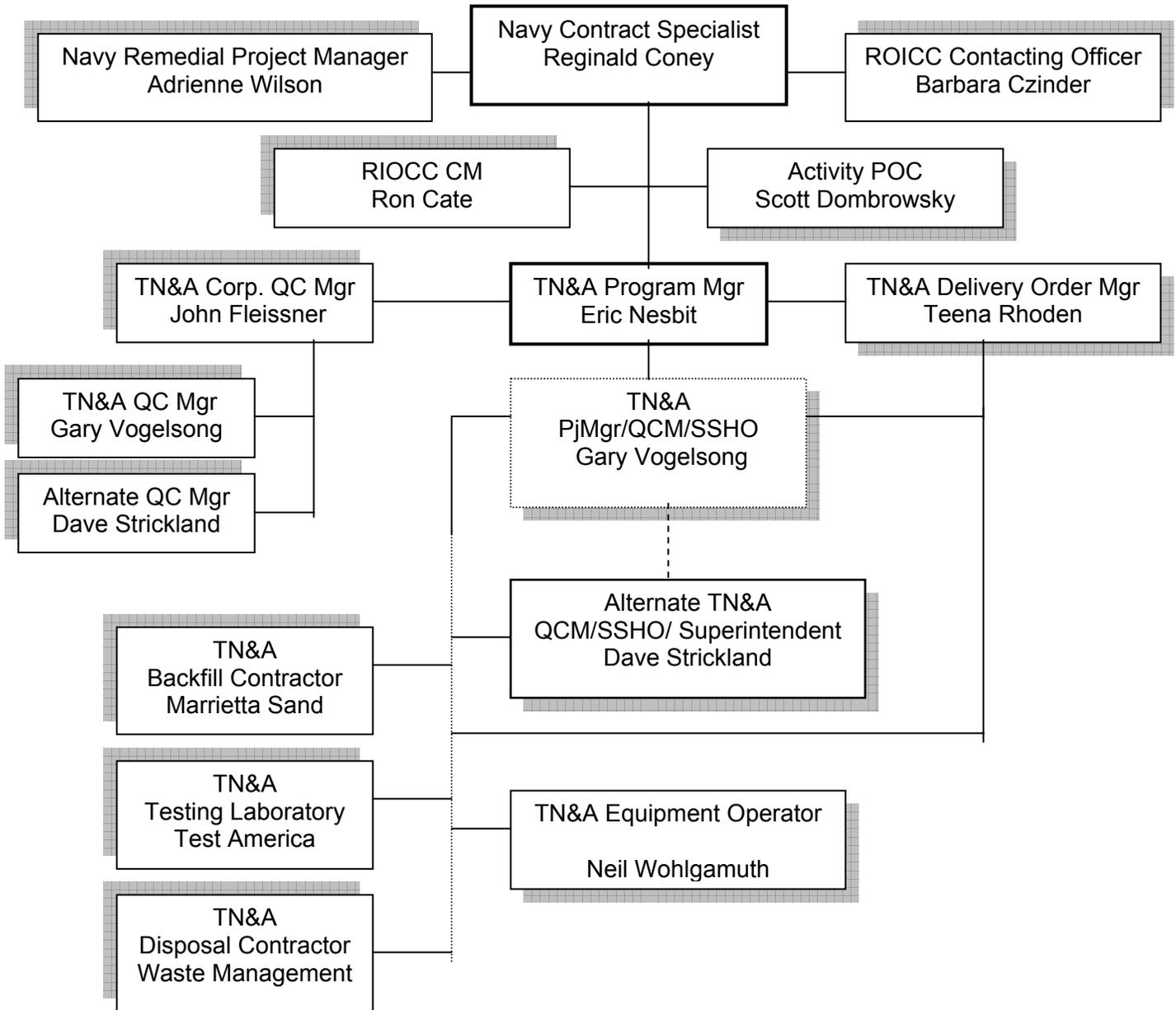
Attachment 1 presents the project schedule.

2.0 PROJECT ORGANIZATION

Based on the Statement of Work requirements and on our understanding of the project, TN&A has developed a project organization strategy to manage this project. The organizational chart provided in Figure 2-1 identifies the key personnel required to manage and successfully complete the identified project elements. This proposed organization provides supporting staff located in Southern and Eastern Region TN&A offices.

The names of the individuals filling the key positions have been identified. If any of the personnel assigned to these key positions become unavailable before the project is complete they will be replaced with other TN&A personnel possessing similar qualifications

Figure 1-1
Project Organization Chart
Contaminated Soil Removal at UST 7 Site 283
NS MAYPORT, FL



2.1 Program Manager

The Program Manager (PM), Mr. Eric Nesbit, P.E., is responsible for the quality of all work performed under this contract. He will monitor the overall progress of the Delivery Order (DO) to ensure that adequate resources are available and that major problems are prevented or minimized. Mr. Nesbit will concentrate on the technical quality, schedule, and cost for all work performed.

2.2 Delivery Order Manager

The DO Manager, Ms. Teena Rhoden., has the primary responsibility and authority for managing the entire DO. Ms. Rhoden is located in our Oak Ridge office.

2.3 Site Manager/QC Manager/Site Safety and Health Officer

The Site Manager/QC Manager/Site Safety and Health Officer, Mr. Vogelsong, is responsible for managing site activities to ensure adherence to project scope, safety to ensure strict compliance with the site-specific HASP and the TN&A Corporate HASP, and quality requirements. Mr. Vogelsong is a certified Construction Quality Control Manager and is located in TN&A's Myrtle Beach, SC Office.

2.4 Alternate Project Superintendent/QC Manager/SSHO

The Alternate Project Superintendent/QC Manager/Site Safety and Health Officer, Mr. David Strickland, is responsible for overseeing field activities to ensure adherence to project scope, safety to ensure strict compliance with the site-specific HASP and the TN&A Corporate HASP, and quality requirements. Mr. Strickland is a certified Construction Quality Control Manager and is located in TN&A's Myrtle Beach, SC Office. As Alternate Project Superintendent/QC Manager/Site Safety and Health Officer, Mr. Strickland will assume primary site management in the absence of Mr. Vogelsong.

3.0 TECHNICAL APPROACH

TN&A will perform this project with an expedited field execution schedule. Following Post-Award Kickoff and Preconstruction Meeting, Work Plan Notice to Proceed, Work Plan and QC documentation approval, the field team will mobilize to the site. Sampling and characterization of the soils to excavated will be completed prior to mobilization to facilitate direct loading of trucks for transportation and disposal. Proper reporting and completion documentation will follow receipt and validation of field and laboratory data. Draft and final Remedial Action Completion Reports will be submitted to document the remedial action. TN&A's approach to accomplishing the tasks in the SOW is as follows:

3.1 Plan and Schedule Development

TN&A has prepared this Work Plan in accordance with Contract Specifications and Contracting Officer direction. Additional plans will be developed to support field operations in accordance with contract requirements. As specified in the SOW, TN&A personnel will participate in all required project meetings. The meetings will consist of Post-Award Kickoff/Work Plan Design Review/Pre-Construction Meeting, and Project Team Meetings. TN&A will be responsible for preparation and presentation of plan and schedule information and distribution of meeting minutes within 10 days after the Post-Award Kickoff/Work Plan Design Review/Pre-Construction Meeting, and Project Team Meetings. TN&A will present the progress of the work as required by the SOW. TN&A team members are very familiar with the partnering process the Navy developed for project teams and have participated in and prepared information for numerous project team and RAB meetings.

TN&A will develop a remedial action work plan (RAWP), a SAP/QAPP, a QCP, a HASP, SWPPP, and a WMP prior to beginning fieldwork. Existing information will be reviewed and considered during document preparation.

The RAWP will present general protocols for the remedial action and drawings and specifications for work to be accomplished. The RAWP will be prepared in accordance with applicable U.S. Environmental Protection Agency (USEPA) and Florida Department of Environmental Protection (FDEP) guidance documents, SOUTHDIV Environmental Work Instructions, and U.S. Navy instruction. The RAWP will also include a WMP that will cover all wastes to be remediated under this DO. If a base-wide WMP is available, an addendum will be prepared to augment the base-wide WMP. The RAWP will include a site specific HASP. The HASP will comply with applicable requirements for worker exposure to non-hazardous, hazardous materials and will include a job hazard analysis for all tasks. All subcontractors will be responsible for compliance with health and safety criteria for their personnel.

The SAP (appendix to the RAWP) will describe soil samples that may be collected to facilitate excavated soil disposal and/or certify backfill to FDEP standards. It is our understanding that confirmation samples will not be collected from the excavation area

A QC plan will be prepared in accordance with appropriate Navy guidance and submitted prior to the Work Plan.

3.2 Site Management

TN&A will manage the project to ensure remediation is conducted in accordance with the SOW. Progress reports will be submitted daily and will include Daily Production, Contractor Quality Control, Health and Safety Meetings, Preparatory and Initial Phase Checklists, equipment and materials inspections, copies of manifests for wastes removed, copies of haul tickets for all materials brought to the site or removed from the site, and copies of all certificates of disposal for wastes removed from the site. Project Plans will be maintained on-site.

3.3 Quality Control

TN&A will provide quality control to ensure that the end product is of the highest quality. The QC Manager will prepare the Daily CQC Reports, initiate the three phases of control, perform inspections and testing as specified and prepare submittals for the Contracting Officer's review and approval.

3.4 Field Activities:

3.4.1 Site Mobilization

TN&A will mobilize all resources necessary (personnel, equipment and materials) to successfully perform the work tasks. Gary Vogelsong and TN&A's assigned equipment operator will mobilize to the site for management, site safety, quality control and field operations. Personnel from subcontractors will work with and under the direction and supervision of TN&A to complete the project.

3.4.2 Site Preparation

TN&A will set up temporary mobile facilities to support field operations and staging areas will be established to support the project activities. Prior to performing any subsurface work, TN&A will obtain required State of Florida and NS Mayport permits, contact any affected parties and perform a utility clearance to ensure proper facility notification and safe excavation. This will be reviewed as part of our CQC Preparatory phase meeting prior to excavation. Access to the fenced area will be coordinated with the US Navy. Utility clearance and security requirements

will be reviewed as part of the CQC Preparatory Phase meetings for each definable feature of work.

Erosion control fencing and/or control measures will be placed around the area to be disturbed as required/needed. The SWPPP will fully detail required erosion control measures. Traffic control and temporary relocation of roads/traffic lanes will be addressed as needed to facilitate project completion. No traffic interruptions are expected as part of this project.

3.4.3 Remedial Activities

- Removal and disposal of soil contaminated with non-hazardous contaminants, in accordance with applicable permits necessary to meet disposal requirements. Excavated material will include soils and surface vegetation.
- Excavate, transport and arrange disposal of approximately 980 tons of non-hazardous waste soil from the five excavation areas shown on the site map provided as part of the SOW. Traffic control measures will be implemented as needed to protect the excavation area, workers, and public. A rubber-tired backhoe or medium sized excavator will be used to excavate the soil from within the delineated area. The excavated material will be staged within the area to be excavated and/or directly loaded into trucks.
- Traffic routing from the site will require trucks to turn right (west) onto Massey Street to the first intersection with Maine Street, turning left (south) through the Main Gate out of the base to Mayport Road. This route will be the shortest within the base. Return route will reverse the exit route. Trucks will be prohibited during the morning and afternoon shift change periods.
- Backfill excavation areas with “clean” fill material and grade to match pre-excavation grades and surrounding areas.
- Restore the land surface of soil excavation areas similar to the original condition and seed disturbed areas.

Contaminated soils will be excavated and staged within the excavation areas and/or loaded directly into trucks that will transport the contaminated material to the Chesser Island Waste Management Landfill. If necessary, the excavations will comply with sloping requirements. Any soil cut for benching will be evaluated and stockpiled as clean backfill. When excavation of contaminated soils is complete, the excavation equipment will be decontaminated of gross materials prior to demobilization from the site.

Backfill will be completed with low organic content soils as specified in the SOW. The soil will be certified as "clean" fill, i.e. meeting the residential Soil Cleanup Target Levels in the Florida Administrative Code Chapter 62-770. The following is a list of the minimum requirements for analysis of fill materials:

- Target Compound List (TCL) Volatiles by USEPA Method 8260B
- TCL Semi-Volatiles by USEPA Method 8270
- TRPH by FL-PRO Method
- TCL Pesticides by USEPA Method 8081A
- Polychlorinated Biphenyls by USEPA Method 8082
- TAL Metals by USEPA Method 6010A/7471A
- PH by USEPA Method 9045B

The backfill will be placed into the excavation in 8 to 12-inch lifts and machine compacted. Final grade and profiles will be completed as close as practical to the original grade. The excavated areas will be restored to a similar or better condition than existed prior to excavation. Disturbed areas will be seeded.

3.4.4 Transportation and Disposal

All waste generated will be shipped under proper manifest or bill of lading by a licensed transporter. The selected waste Management disposal facility, Waste management Bay County Landfill, is licensed to receive waste as profiled and will generate a certification of disposal upon final disposal. Manifests will be signed by a Navy representative or designate.

Trucks leaving the site will be cleaned of gross materials to avoid transfer to roadways. Haul routes will be monitored and cleaned of project-associated debris throughout the project duration.

3.4.5 Surveying

A survey has been completed by others to establish layout of areas to be excavated. Post excavation surveys will not be conducted.

3.4.6 Completion Reports

Upon completion of the remedial actions and receipt of the analytical and disposal data, TN&A will prepare draft and final Completion Reports. The draft and final Completion Reports will include the necessary information required by the Navy, USEPA Region IV and FDEP. The report shall follow formats specified in SOW #0030-F.

3.4.7 Site Demobilization

Site personnel, equipment and temporary facilities will be demobilized from the site at the conclusion of active field operations. Cleanup of the area will occur daily thru project completion. The construction equipment and trucks will be cleaned of gross materials prior to leaving the site.

4.0 SCHEDULE

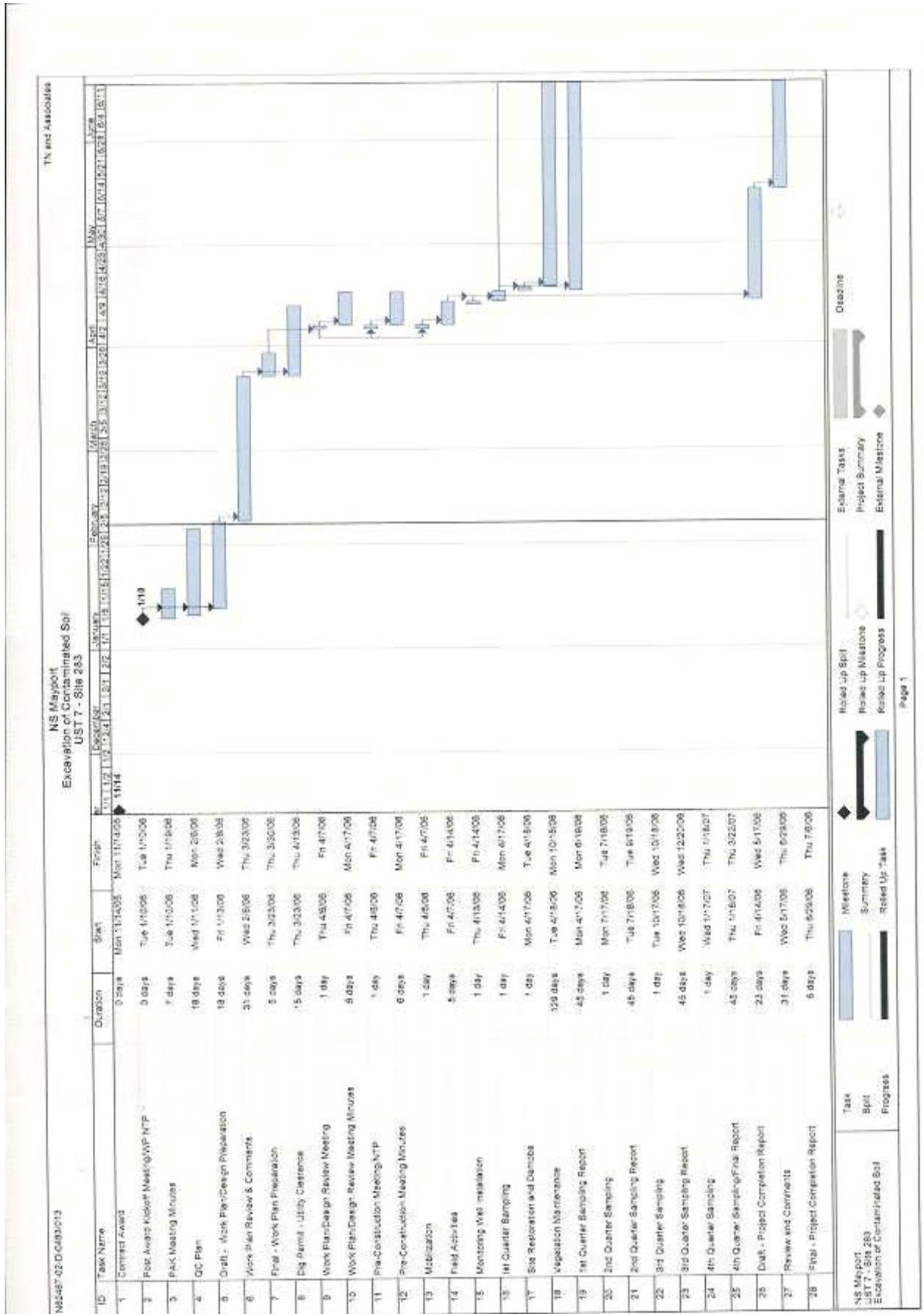
The proposed project schedule is found following in Attachment 1 and is submitted as a component of the project proposal submittal. Schedule updates will be adjusted to reflect actual award and scheduled meeting dates, and will be updated as changes dictate.

Attachment 1

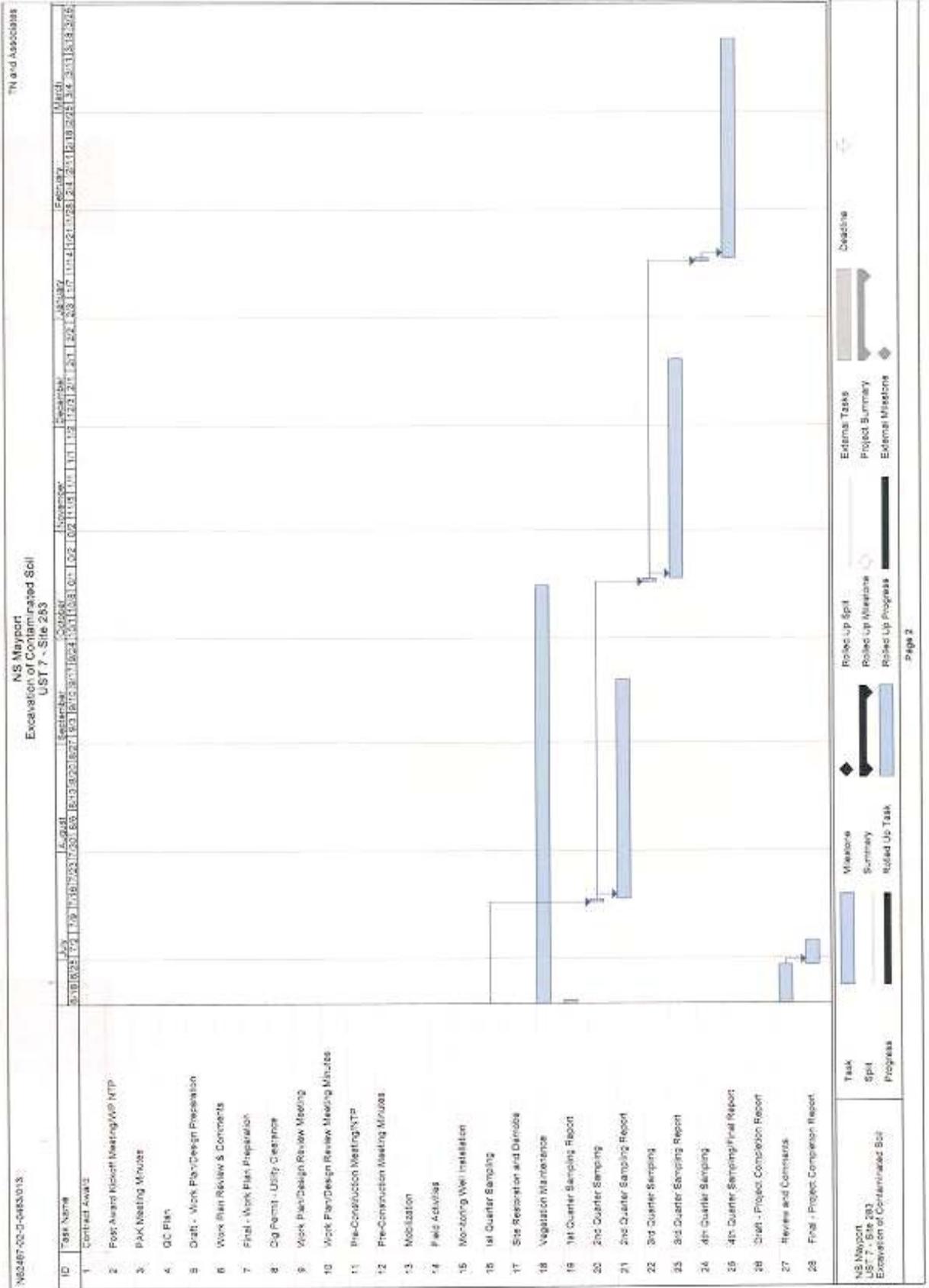
Schedule

(also submitted as part of Submittal Transmittal 001)

Soil Removal at UST 7 – NS Mayport – Work Plan



Soil Removal at UST 7 – NS Mayport – Work Plan



APPENDIX A

SAMPLING AND ANALYSIS PLAN

APPENDIX B

QUALITY CONTROL PLAN

APPENDIX C

HEALTH AND SAFETY PLAN

APPENDIX D

WASTE MANAGEMENT PLAN

APPENDIX E

STORM WATER POLLUTION PREVENTION PLAN