## Addendum No. 4

## <u>to</u>

## **Request for Proposals**

#### **FOR**

#### DEMOLITION AND SITE RESTORATION OF THE FORMER JAMESTOWN MALL PROPERTY IN ST. LOUIS COUNTY

Date: June 16, 2023

#### ADDITIONAL INFORMATION TO SUPPLEMENT RFP

This addendum is issued as supplemental information to the Request for Proposals for the Demolition and Site Restoration of the Former Jamestown Mall Property in St. Louis County.

- 1) **Bid Proposal Form:** As specified on the Bid Proposal Form, all Bidders must be properly registered with and possess valid contractor or trade licenses from all applicable regulatory agencies required to perform the work at the time of submission of the bid. In the event the Bidder is not registered with or possesses applicable licenses from the applicable regulatory agencies, the submitted bid will be contingent upon future licensing. For further clarification, a demolition license is not required in St. Louis County.
- 2) Link to Stock & Associates CAD file and password:

  https://stockassoc.com/jamestown-mall-demolition-project/ PW: Jamestown2023
- 3) **Deadline for Submission of Questions**: Please note that the Deadline for the Submission of Questions is extended to June 22, 2023, and an updated schedule is set forth below:

| Activity                             | Date                        |
|--------------------------------------|-----------------------------|
| RFP Issued                           | May 4, 2023                 |
| First Pre-Bid Meeting                | May 23, 2023, 9:00 a.m.     |
| Second Pre-Bid Meeting               | May 30, 2023, 9:00 a.m.     |
| Deadline for Submission of Questions | June 22, 2023, at 5:00 p.m. |
| Proposal Due Date                    | June 30, 2023, at 3:00 p.m. |
| Contract Awarded                     | July 20, 2023               |

- 4) **UST Removal Bid Form**. As provided in Addendum #2, Exhibit B, the SCI Environmental Report discussed the possibility of UST. With respect to the submission of the bid proposal for this work, please use the attached **Exhibit A** for the submission of unit pricing for UST removal.
- 5) **Stock & Associates**: As a supplement to Attachment 4 of the Original RFP, please see updated Demolition Specification Sheets attached hereto as **Exhibit B**. Please make reference to the updated Demolition Specification Sheets. However, the following provides a brief summary of material changes:
  - 1. C2.0
    - a. Updated Earthwork Notes
    - b. Revised SCI Testing and Inspection note 1.
  - 2. C5.6
    - a. Updated BMP Schedule, Silt Fence quantity
    - b. Updated Silt Fence locations at perimeter of grass swale areas.
  - 3. C8.1
    - a. Included sheet to set.

No other provisions of the RFP are affected by this addendum. All other terms and conditions from the RFP shall remain in effect.

#### **EXHIBIT A**

#### **UST BID PROPOSAL FORM**

|                   | II. 1 1 C4 7 1 D   |             |            |     |
|-------------------|--|-------------|------------|-----|
|                   | Underground Storage Tank R                               | emovai      | Т          |     |
| Item #            | Scope of Work  | Units       | Unit Price | Fee |
|                   |  |             |            |     |
|                   | Removal, cleaning and disposal of UST and                |             |            |     |
| UST 1             | associated piping (including disposal of                 | 1           |            |     |
|                   | sludge, if present)                                      |             |            |     |
| UST 2             | Backfill and compaction of excavation 1                  |             |            |     |
|                   |  |             |            |     |
| UST Removal Total |  |             |            |     |
|                   |  |             |            |     |
|                   | Alternates   |             |            |     |
|                   | Removal and disposal of UST contents                     | up to 250   |            |     |
| Alt 1             | (petroleum-impacted water)                               | gallons     |            |     |
|                   | Removal and disposal of UST contents                     | up to 250   |            |     |
| Alt 2             | (petroleum product)                                      | gallons     |            |     |
|                   |  | up to 50    |            |     |
|                   | Removal and disposal of petroleum-impacted               | cubic yards |            |     |
| ALT 3             | LT 3   soil (approxamately 50 cubic yards)   Cubic yards |             |            |     |

#### EXHIBIT B

## **Supplement to Attachment 4 of Original RFP**

See attached.

2.) GRADING CONTRACTOR SHALL INSTALL SILTATION CONTROL PRIOR TO STARTING THE GRADING. ADDITIONAL SILTATION CONTROL DEVICES SHALL BE INSTALLED AS DIRECTED BY ST. LOUIS COUNTY.

3.) ALL MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARDS AND SPECIFICATIONS OF ST. LOUIS COUNTY AND THE METROPOLITAN ST. LOUIS SEWER DISTRICT (MSD).

4.) GRADING & STORM WATER PER 2009 M.S.D. STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS AND STANDARD SPECIFICATIONS.

5.) ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION

CONTROL DEVICES AND/OR SEEDING AND MULCHING. 6.) ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH. RUBBISH, ORGANIC MATERIAL AND DEBRIS. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION. SEE GEOTECHNICAL REPORT PREPARED BY TERRACON, TITLED "PRELIMINARY GEOTECHNICAL ENGINEERING REPORT" DATED SEPTEMBER 1, 2020. TERRACON PROJECT No. 15205077.

7.) GRADING CONTRACTOR SHALL KEEP EXISTING OFFSITE ROADWAYS CLEAN

8.) NO GRADE SHALL EXCEED 3:1 SLOPE, EXCEPT AS NOTED AND APPROVED PER PLAN.

OF MUD AND DEBRIS AT ALL TIMES.

IMMEDIATELY SEEDED OR SODDED.

9.) ALL LANDSCAPE/SOD AND/OR SEED AREAS TO BE FILLED WITH A

MINIMUM OF 6" OF TOPSOIL 10.) ALL LANDSCAPED AREAS DISTURBED BY OFF-SITE WORK SHALL BE

11.) ADEQUATE TEMPORARY OFF-STREET PARKING FOR CONSTRUCTION EMPLOYEES SHALL BE PROVIDED. PARKING ON NON-SURFACED AREAS SHALL BE PROHIBITED IN ORDER TO ELIMINATE THE CONDITION WHEREBY MUD FROM CONSTRUCTION AND EMPLOYEES' VEHICLES IS TRACKED ONTO THE PAVEMENT CAUSING HAZARDOUS ROADWAY AND DRIVEWAY CONDITIONS

12.) ALL PUBLIC SEWER CONSTRUCTION MUST CONFORM TO 2009 M.S.D. "STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS"

13.) THE UNDERGROUND UTILITIES SHOWN HEREIN HAVE BEEN SHOWN FROM SURVEY AND RECORD INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THEACTUAL LOCATION OF ALL UTILITIES, SHOWN OR NOT SHOWN, AND SAID UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING. EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

14.) CLEARING TECHNIQUES THAT RETAIN EXISTING VEGETATION TO THE MAXIMUM EXTENT PRACTICABLE SHALL BE USED AND THE TIME PERIOD FOR DISTURBED AREAS TO BE WITHOUT VEGETATIVE COVER SHALL BE MINIMIZED TO THE EXTENT PRACTICAL.

15.) AREAS SHALL BE SEEDED AFTER CLEARING AND GRUBBING WHEN NO ACTIVITY WILL OCCUR WITHIN THIRTY DAYS.

## MSD NOTES

### STANDARD CONSTRUCTION:

ALL STORM AND SANITARY SEWER STRUCTURES AND APPURTENANCES TO BE DEDICATED TO MSD, OR TO BE PRIVATE UNDER MSD INSPECTION, SHALL CONFORM TO THE METROPOLITAN ST. LOUIS SEWER DISTRICT, STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES, 2009. THAT WILL INCLUDE STANDARD DETAILS SHOWN THEREIN, AND SHALL INCLUDE ALL SUBSEQUENT

SOME RECENT CHANGES CONCERN PLASTIC PIPE MATERIALS AND PIPE FIELD TESTING AND PERFORMANCE, AND INCLUDE THE FOLLOWING: PART 2 - MATERIALS OF CONSTRUCTION

HIGH DENSITY POLYETHYLENE (HDPE) PIPE IS NOT ALLOWED FOR GRAVITY SEWERS FOR STORM, COMBINED, OR SANITARY SEWERS THAT ARE "PUBLIC" OR "PRIVATE UNDER MSD INSPECTION".

POLYPROPYLENE (PP) PIPE IS ALLOWED AS FOLLOWS FOR GRAVITY SEWERS THAT ARE 'PUBLIC" OR "PRIVATE UNDER MSD INSPECTION: FOR USE IN SANITARY AND COMBINED SEWERS 12 TO 60 INCHES IN DIAMETER IT SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2764 'STANDARD SPECIFICATION FOR 6 TO 60 IN. POLYPROPYLENE (PP)

CORRUGATED DOUBLE AND TRIPLE WALL PIPE AND FITTINGS FOR NON- PRESSURE SANITARY SEWER

FOR USE IN STORM SEWERS 12 TO 24 INCHES IN DIAMETER IT SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2881 'STANDARD SPECIFICATION FOR 12 TO 60 IN. POLYPROPYLENE (PP) DUAL WALL PIPE AND FITTINGS FOR NON-PRESSURE STORM SEWER APPLICATIONS; "OR

FOR USE IN STORM SEWERS 12 TO 60 INCHES IN DIAMETER IT SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2764 "STANDARD SPECIFICATION FOR 6 TO 60 IN. POLYPROPYLENE (PP) CORRUGATED DOUBLE AND TRIPLE WALL PIPE AND FITTINGS FOR NON- PRESSURE SANITARY SEWER APPLICATIONS."

PART 4 - PIPE SEWER CONSTRUCTION

SECTION B, PIPE FIELD TESTS, PARAGRAPH 2, REACH INTEGRITY TESTING, DELETE THE FIRST SENTENCE AND THE FOLLOWING REPLACEMENT APPLIES:

ALL SANITARY AND COMBINED SEWERS SHALL SUSTAIN A MAXIMUM LEAKAGE LIMIT OF 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY, AS REQUIRED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES SPECIFICATIONS.

SECTION B, PIPE FIELD TESTS, PARAGRAPH 2, REACH INTEGRITY TESTING, SUBPARAGRAPH C, INFILTRATION/EXFILTRATION TESTING - DELETE THE SIXTH SENTENCE, CONCERNING LEAKAGE LIMITS, AND THE FOLLOWING REPLACEMENT APPLIES:

THE MEASUREMENT OF LEAKAGE SHALL NOT EXCEED 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY, AS REQUIRED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES SPECIFICATIONS.

SECTION B, PIPE FIELD TESTS, PARAGRAPH 4, MANHOLE TESTING, SUBPARAGRAPH A, VACUUM TESTING - AFTER THE FIRST SENTENCE, THE FOLLOWING ADDITION APPLIES:

THE VACUUM TEST MUST BE PERFORMED PRIOR TO BACKFILLING AROUND THE MANHOLE UNLESS THE CONTRACTOR PROVIDES DOCUMENTATION FROM THE PRECAST MANHOLE MANUFACTURER STATING THAT THE MANHOLE MAY BE VACUUM TESTED AFTER BACKFILLING HAS TAKEN PLACE. THE CONTRACTOR MUST SUBMIT THIS DOCUMENTATION PRIOR TO BACKFILLING AROUND ANY

SECTION B, PIPE FIELD TESTS, PARAGRAPH 4, MANHOLE TESTING, SUBPARAGRAPH B, EXFILTRATION TESTING - DELETE THE SECOND SENTENCE, CONCERNING LEAKAGE LIMITS, AND THE FOLLOWING ADDITION APPLIES:

FOR EXFILTRATION TESTING, THE ALLOWABLE LEAKAGE LIMIT IS 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY WHEN THE AVERAGE HEAD ON THE TEST SECTION IS THREE FEET (3') OR LESS.

IF REINFORCED CONCRETE PIPE IS USED FOR SANITARY SEWERS OR COMBINED SEWERS LARGER THAN 27", ALL PIPE AND JOINTS SHALL CONFORM TO ASTM C 361. IN ADDITION, IF THE DIAMETER IS LARGER THAN 48", THE JOINT TYPE MUST INCLUDE A GASKET THAT IS CONFINED IN A GROOVE IN THE

## CONSTRUCTION SITE RUNOFF:

CONSTRUCTION SITE RUNOFF SHALL NOT FLOW INTO BMP AREAS. ALL STORMWATER FLOW TO BMP AREAS SHALL BE DIVERTED, PLUGGED OR DISCONNECTED UNTIL THE CONSTRUCTION SITE IS STABLE AND THE MSD INSPECTOR PROVIDES APPROVAL TO PLACE THE BMP ON-LINE. LIMITS OF DISTURBANCE:

THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHEREVER POSSIBLE.

# ST. LOUIS COUNTY NOTES

- 1.) THE DEVELOPER IS REQUIRED TO PROVIDE ADEQUATE STORM WATER SYSTEMS IN ACCORDANCE WITH SAINT LOUIS COUNTY AND MSD STANDARDS.
- 2.) ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH SAINT LOUIS COUNTY AND MSD STANDARDS.
- NO SLOPES SHALL EXCEED 3:1 MAXIMUM.
- 4.) STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
- 5.) PROVIDE ADEQUATE OFF-STREET PARKING FOR CONSTRUCTION EMPLOYEES. PARKING ON NON-SURFACED AREAS SHALL BE PROHIBITED IN ORDER TO ELIMINATE THE CONDITION WHEREBY MUD FROM CONSTRUCTION AND EMPLOYEE VEHICLES IS TRACKED ONTO THE PAVEMENT CAUSING HAZARDOUS ROADWAY AND DRIVEWAY CONDITIONS.
- 6.) ADDITIONAL SILTATION CONTROL MAY BE REQUIRED BY ST. LOUIS COUNTY DEPARTMENT OF
- 7.) TRUCKS SHALL NOT EXCEED POSTED WEIGHT LIMITS FOR ST. LOUIS COUNTY BRIDGES DURING
- 8.) SEDIMENT SHALL BE WASHED FROM ALL VEHICLES AT WASHDOWN STATION PRIOR TO LEAVING SITE. NO TRACKING OF MUD ONTO COUNTY ROADS SHALL BE ALLOWED.
- 9.) INTERIM STORM WATER DRAINAGE CONTROL IN THE FORM OF SILTATION CONTROL MEASURES ARE REQUIRED.
- 10.) ALL CONSTRUCTION SHALL BE PER MOST CURRENT DETAILS LOCATED IN THE ST. LOUIS COUNTY DESIGN CRITERIA MANUAL AND/OR THE SEDIMENT AND EROSION CONTROL MANUAL.
- 11.) ALL AFFECTED OFFSITE PROPERTY OWNERS SHALL BE GIVEN NOTICE 48 HOURS IN ADVANCE
- 12.) MAXIMUM LEGAL LENGTHS IN THE COUNTY ARE FORTY (40) FEET FOR ANY SINGLE UNIT TRUCK AND FIFTY-FIVE (55) FEET FOR ANY COMBINATION OF VEHICLES, INCLUDING THE LOAD. MAXIMUM LEGAL WIDTH IS EIGHT (8) FEET AND MAXIMUM HEIGHT IS THIRTEEN AND ONE-HALF (13 ½) FEET. LEGAL WEIGHT LIMITS IN THE COUNTY ARE THE SAME AS THOSE REQUIRED BY MISSOURI STATE LAWS, EXCEPT IN CASES WHEN THE COUNTY COUNCIL HAS ESTABLISHED ROADWAY LOAD LIMITS BY ORDINANCE OR WHEN BRIDGES ARE POSTED UNDER STATE REGULATIONS. ANY VEHICLES EXCEEDING THESE LIMITS SHALL BE REQUIRED A SPECIAL USE PERMIT FOR OVERWEIGHT AND/OR OVER-DIMENSION VEHICLES PRIOR TO DRIVING ON ST.
- 13.) CONTRACTOR TO PROVIDE A PERIMETER SECURITY FENCE AROUND ENTIRE DISTURBED AREA OR

IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN RELATED PERMITS.

LOUIS COUNTY ROADWAYS. CONTACT TONY BARNETT AT (314) 615-8515 FOR PERMITS. AND

## EARTHWORK NOTES

CUT: 38,561 ± CUBIC YARDS (EXCLUDES UTILITY & SEWER BACKFILL/EXCAVATION SPOILS)

FILL: 235,755 ± CUBIC YARDS (INCLUDES 15% SHRINKAGE)

NET: 197,194 ± CUBIC YARDS

THE ENGINEER HAS MADE THE FOLLOWING ASSUMPTIONS IN THE ABOVE STATED QUANTITIES:

EARTHWORK ASSUMPTIONS: 11" PAVEMENT SUBGRADE (AVERAGE DEPTH)

9" BUILDING SUBGRADE 15% SHRINKAGE APPLIED TO FILL MATERIAL

NO TOPSOIL REMOVAL NO SPOILS FOR REMOVAL OF UTILITIES/FOOTINGS/FOUNDATIONS/PADS/ETC. INCLUDED.

THE ENGINEER HAS CALCULATED THE ABOVE QUANTITIES OF EARTHWORK TO BE REGARDED AS AN ESTIMATE OF THE BULK MOVEMENT OR REDISTRIBUTION OF SOILS ON THIS PROJECT. AS AN ESTIMATE, THESE QUANTITIES ARE INTENDED FOR GENERAL USE, AND THE ENGINEER ASSUMES NO LIABILITY FOR COST OVERRUNS DUE TO EXCESS EXCAVATED MATERIALS OR SHORTAGES OF FILL.

THE QUANTITIES ESTIMATED FOR EACH OF THE IMPROVEMENT ITEMS LISTED ABOVE ARE BASED UPON THE HORIZONTAL AND VERTICAL LOCATION OF THE IMPROVEMENTS AS PROPOSED ON THE SITE ENGINEERING PLANS PREPARED BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.

THE ENGINEER'S EARTHWORK ESTIMATE DOES NOT INCLUDE ANY OF THE FOLLOWING ITEMS REQUIRING EARTHWORK THAT MAY BE NECESSARY FOR COMPLETION OF THE PROJECT: MISCELLANEOUS UNDERGROUND CONDUITS, INCLUDING SEWER LINES AND WATER MAINS, STANDARD MANHOLES; PROCESS OR TRANSFER PIPING; ELECTRICAL OR TELEPHONE CONDUITS OR DUCT BANKS; BASES FOR LIGHT STANDARDS; BUILDING FOOTINGS AND FOUNDATIONS, POSSIBLE PIERS OR CAISSONS AND/OR RETAINING WALL BACKFILL, ETC. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACTUAL SIZE OF THE FIELD EXCAVATIONS MADE FOR THE REMOVAL OF UNDERGROUND STRUCTURES, AND AS SUCH, THE ACTUAL QUANTITIES OF EARTHWORK FROM SUCH ITEMS MAY VARY FROM THE ESTIMATE SHOWN ABOVE.

THE ENGINEER ASSUMES NO RESPONSIBILITY FOR COSTS INCURRED DUE TO REMOVAL OF UNSUITABLE

IT IS THE RESPONSIBILITY OF THE GRADING CONTRACTOR TO PERFORM AN INDEPENDENT EARTHWORK ANALYSIS PRIOR TO SUBMISSION OF BID. IN THE EVENT A DISCREPANCY EXISTS THE GRADING CONTRACTOR SHALL NOTIFY ENGINEER OF DISCREPANCY PRIOR TO SUBMISSION OF BID.

AFTER CONTRACTOR RECEIVES AWARD AND NOTICE TO PROCEED (NTP), CONTRACTOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY AND PERFORM EARTHWORK ANALYSIS PRIOR TO COMMENCING GRADING TO

IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND/OR EXPORT AND IMPORT ALL MATERIALS NEEDED TO COMPLETE THE FINISHED GRADES AND ELEVATIONS AS SHOWN ON THE "SITE GRADING PLAN". IT IS THE CONTRACTOR'S RESPONSIBILITY TO APPLY THE RECOMMENDATIONS SUPPLIED IN THE SEPTEMBER 1, 2020 GEOTECHNICAL REPORT, TITLED "PRELIMINARY GEOTECHNICAL ENGINEERING REPORT, JAMESTOWN MALL REDEVELOPMENT, ST. LOUIS COUNTY, MO, TERRACON PROJECT NO. 15205077" PREPARED BY TERRACON CONSULTANTS, INC. AND ALL ITS SUPPLEMENTAL PROVISIONS AND ADDENDUMS FOR ADDITIONAL

IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN "ALL" GEOTECHNICAL INVESTIGATIONS FROM THE "OWNER". CONTRACTOR SHALL REVIEW AND FAMILIARIZE THEMSELVES WITH RECOMMENDATIONS AS OUTLINED BY THE PROJECT GEOTECHNICAL ENGINEER AND INCORPORATE IT IN THEIR PROPOSED SCOPE OF

RE-USE OF EXISTING STOCKPILE MATERIALS AND EXCAVATION SPOILS ON-SITE SHALL BE VERIFIED AND COORDINATED WITH THE PROJECT GEOTECHNICAL ENGINEER. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ANY ROCK ENCOUNTERED. CONTRACTOR SHOULD FAMILIARIZE THEMSELVES WITH ALL THE GEOTECHNICAL REPORTS AVAILABLE AND REVIEW THE

RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. ALL EXISTING PAVEMENTS, BUILDING FOUNDATION SYSTEMS AND RETAINING WALLS, UNLESS OTHERWISE NOTED, SHALL BE REMOVED FROM THE SITE. CRUSHING AND/OR PULVERIZING AND REUSE ON SITE IS NOT

# HAUL ROUTE INFORMATION

TOTAL CUBIC YARDS TO BE HAULED = 0 C.Y. # OF TRUCKS/DAY = 0

CUBIC YARDS/TRUCK = 0= 0

DURATION OF HAUL OPERATION = N/A

CONTRACTOR NOTE: TRUCKS SHALL NOT EXCEED POSTED WEIGHT LIMITS

# TESTING AND INSPECTION

1. SCI RECOMMENDS THE FILL PLACED ON-SITE BE COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY, AS STATED IN THE PRELIMINARY GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT PERFORMED BY TERRACON. DATED SEPTEMBER 1, 2020. SCI RECOMMENDS THAT THE FILL PLACED ON-SITE CONSIST OF LÓW VOLUME CHANGE POTENTIAL SOIL, I.E. LEAN CLAY. LEAN CLAY FILL COMPACTED TO THE RECOMMEND CRITERION WILL PROVIDE SUITABLE SUPPORT FOR TYPICAL, LIGHT LOADED COMMERCIAL AND RESIDENTIAL STRUCTURES

2. CONTRACTOR TO COORDINATE WITH SCI ENGINEERING TO PERFORM ALL NECESSARY FIELD TESTING TO ENSURE PROPER COMPACTION REQUIREMENTS INDICATED IN THE GEOTECHNICAL REPORT

AND SUMMARIZED BELOW:

# COMPACTION REQUIREMENTS PER TERRACON

## Fill Compaction Requirements

| Item                                    | Description  |  |
|---|--|--|
| Fill Lift Thickness                     | 9 inches or less in loose thickness for heavy compaction equipment<br>4 to 6 inches or less in loose thickness for light, hand-operated compaction<br>equipment  |  |
| Compaction<br>Requirements <sup>1</sup> | At least 95 percent of the material's maximum standard Proctor dry density for cohesive soils and at least 70 percent relative density for granular materials  |  |
| Moisture Content –<br>Cohesive Soil     | , in a parameter of the |  |
| Moisture Content –<br>Granular Material | Workable moisture levels <sup>2</sup>  |  |

1. We recommend that engineered fill be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified

moisture and compaction requirements are achieved. 2. Specifically, moisture levels should be maintained low enough to allow for satisfactory compaction to be achieved without the cohesionless fill material pumping when proofrolled.

CERTIFICATE OF AUTHORITY NUMBER: 000996

GEORGE M. STOCK E-2511

MICHAEL STOCK

REVISIONS: StL Co. Comments 6.13.202 Rev Specs Added Specs 5.12.2023

Addendum 3

J.E.F.

03/09/2022 22MSD-00125

Addendum 4

6.06.2023

6.16.2023

M.D.N.R. #: MORA21735

**SPECIFICATION** SHEET

S.L.C. H&T #: H&T PAC # HT7608 22PAC-00102

C-2.0

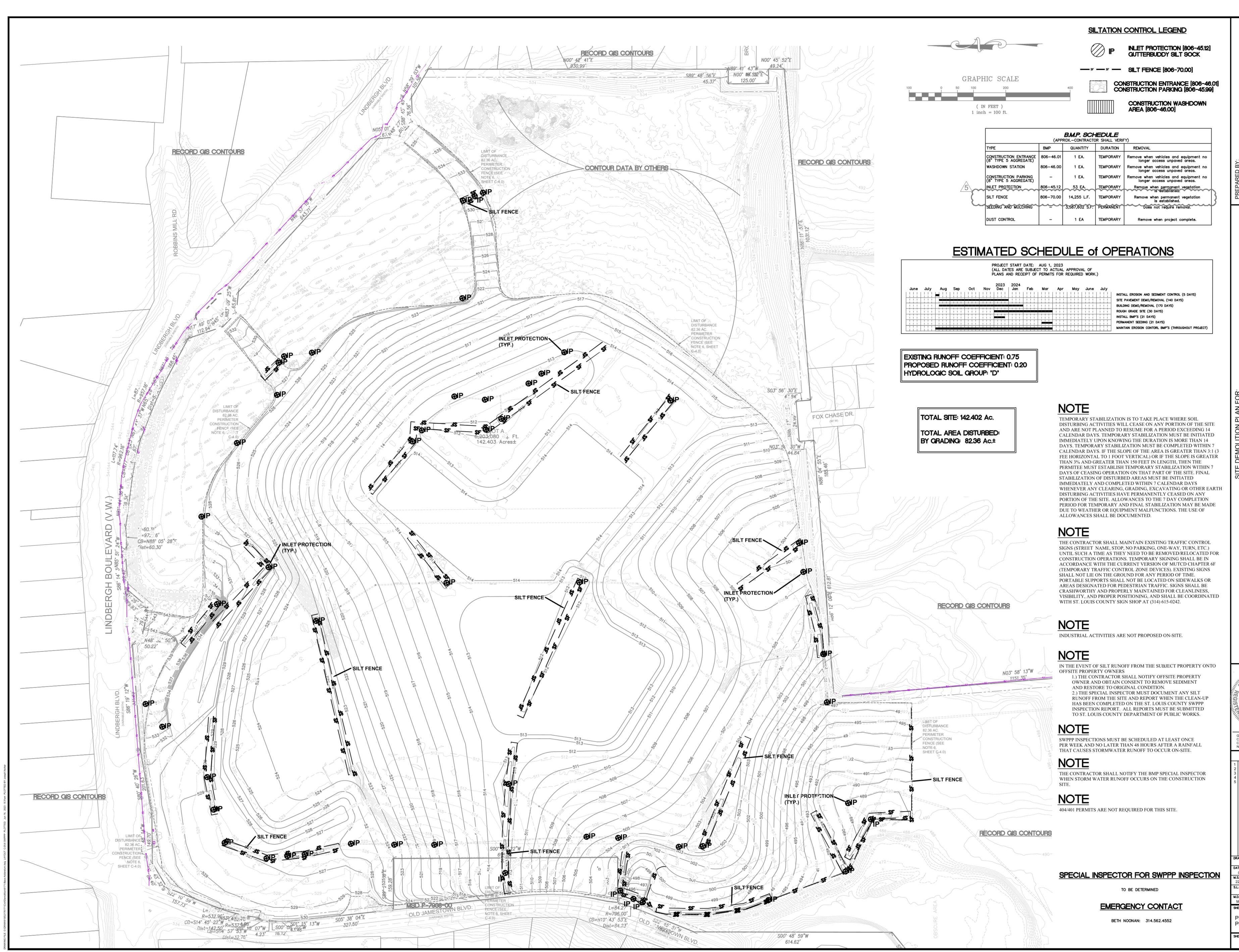
RE-CONFIRM BID QUANTITIES. EARTHWORK REMEDIATION, SUBGRADE PREPARATION AND BACKFILL RECOMMENDATIONS.

BORROW/EXCESS MATERIAL

ROADS TRAVÉLED SITE HAUL TO/FROM = N/A

CONFIRM TO/FROM SITES ARE PERMITTED SITE = N/A

FOR ST. LOUIS COUNTY BRIDGES DURING HAUL OPERATIONS.



MICHAEL STOCK NUMBER , E-25116<sub>.</sub>

GEORGE M. STOCK E-25116 CERTIFICATE OF AUTHORITY NUMBER: 000996

REVISIONS: StL Co. Comments 6.13.2022 Rev Specs Added Specs 5.12.2023 6.06.2023 Addendum 3 6.16.2023 Addendum 4

S.L.C. H&T #: H&T PAC # 22PAC-00102

PROPOSED SWPP

C-5.6

PLAN

