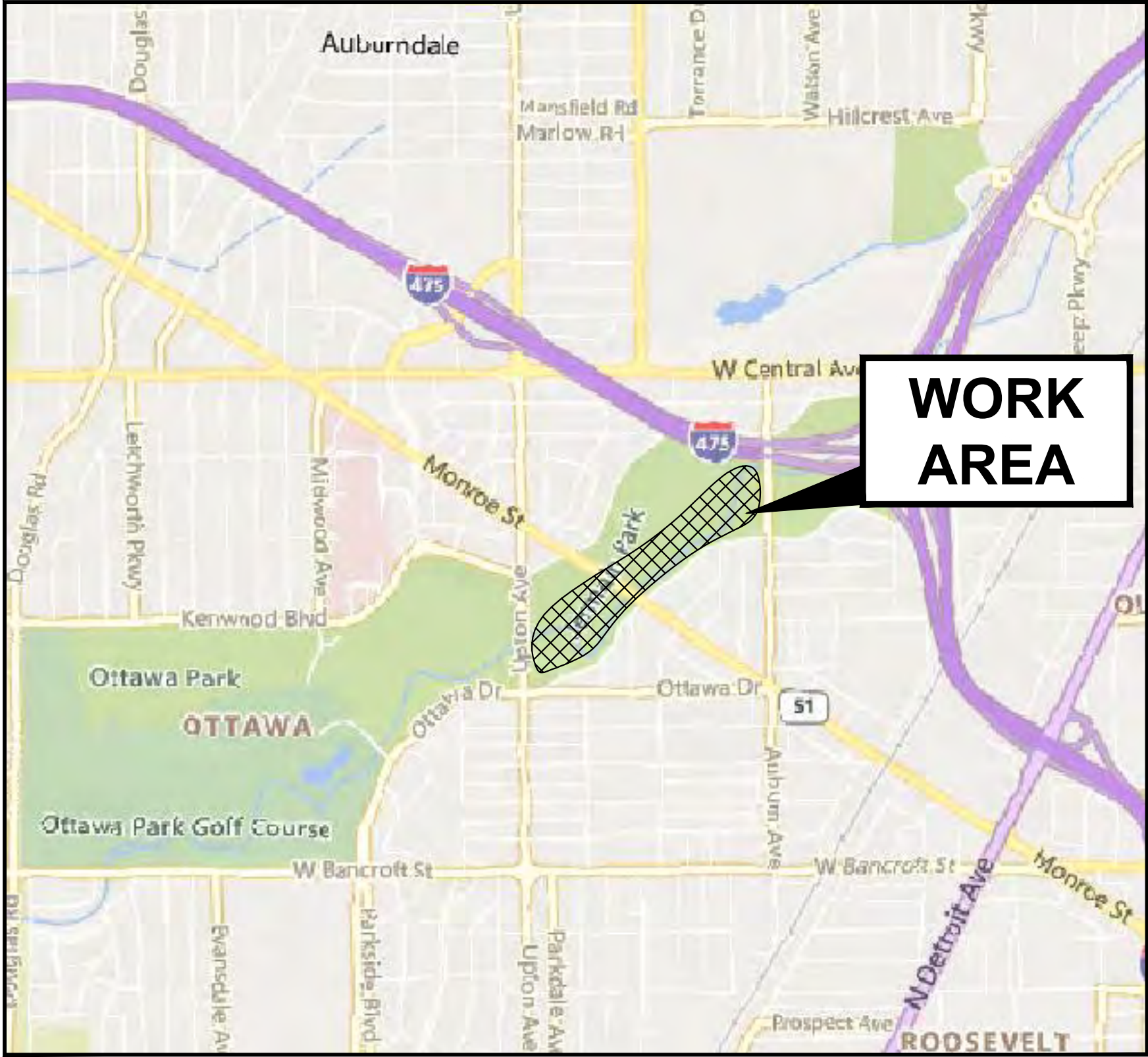




LOCATION MAP
NOT TO SCALE

UNDERGROUND UTILITIES

TWO WORKING DAYS BEFORE YOU DIG CALL 1-800-362-2764 (TOLL FREE) OHIO UTILITIES PROTECTION SERVICE
NON MEMBERS
MUST BE CALLED DIRECTLY
OHIO OIL & GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE
WWW.OGPUPS.COM 1-800-925-0988

LEGEND

EXISTING	PROPOSED
GAS LINE	TREES REMOVED
TREES (CONIF.,DECID.)	RIPRAP/STONE
BIKE PATH	

JERMAIN PARK
RESTORATION OF OTTAWA RIVER
BETWEEN UPTOWN AVENUE AND AUBURN AVENUE
CITY OF TOLEDO, LUCAS COUNTY, OHIO

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PROJECT DESCRIPTION

THE SIBLEY CREEK-OTTAWA RIVER HYDROLOGIC UNIT (HU) IS LOCATED IN THE CITY OF TOLEDO, LUCAS COUNTY, OHIO, AND IS ONE OF THE HUS IN THE MAUMEE AREA OF CONCERN (AOC). THE HU DRAINS AN AREA OF 156 SQUARE MILES OF RURAL AND RESIDENTIAL LAND AND FLOWS INTO LAKE ERIE. THE OTTAWA RIVER IS THE MAIN WATERBODY WITHIN THE SIBLEY CREEK-OTTAWA RIVER HU AND FLOWS THROUGH JERMAIN PARK. WATER QUALITY MONITORING INDICATES AQUATIC LIFE USE TO BE IN NON-ATTAINMENT STATUS FOR FISH POPULATIONS (ATTAINING 83% OF THE TARGET INDEX OF BIOTIC INTEGRITY (IBI) SCORE) AND BENTHIC COMMUNITIES (ATTAINING 80% OF THE TARGET INVERTEBRATE COMMUNITY INDEX (ICI) SCORE).

THE PROPOSED PROJECT IS A 76-ACRE AREA LOCATED IN JERMAIN PARK BETWEEN UPTOWN AVENUE AND AUBURN AVENUE, WHICH CONSISTS PREDOMINANTLY OF FORESTED FLOODPLAINS AND IS ADJACENT TO PARK AMENITIES INCLUDING A NEWLY PAVED PARKING LOT, TENNIS COURTS, AND PARK BUILDINGS. THE SITE ALSO CONTAINS A MOUNTAIN BIKE TRAIL SYSTEM THROUGH THE FORESTED FLOODPLAIN AREA. HIGH VELOCITY SEASONAL FLOWS AND STEEP EMBANKMENTS OFF SOUTH COVE BOULEVARD HAVE CONTRIBUTED TO SEVERAL AREAS OF ERODED, UNDERCUT, AND DESTABILIZED BANKS, WHICH CONTRIBUTE HEAVY SILT LOADS TO THE OTTAWA RIVER AND REDUCE FUNCTIONAL RIPARIAN HABITAT. THE PROJECT INCLUDES BANK STABILIZATION WORK TO REDUCE EROSION AND INCREASE HABITAT THROUGH THE USE OF BIOENGINEERING PRACTICES AND NATIVE PLANTINGS.

NOTES

THE 2023 CONSTRUCTION MATERIAL STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL, SHALL GOVERN THIS IMPROVEMENT.

THIS PROJECT WAS FINANCED THROUGH THE GREAT LAKES RESTORATION INITIATIVE (GLRI) PROGRAM AND IS WORKING IN PARTNERSHIP WITH NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) AND GREAT LAKES COMMISSION (GLC). THE CONTENTS AND VIEWS, INCLUDING ANY OPINIONS, FINDINGS, OR CONCLUSIONS OR RECOMMENDATIONS, CONTAINED IN THIS PRODUCT OR PUBLICATION ARE THOSE OF THE AUTHORS AND HAVE NOT BEEN SUBJECT TO ANY OHIO ENVIRONMENTAL PROTECTION AGENCY (OHIO EPA) OR U.S. ENVIRONMENTAL PROTECTION AGENCY (U.S EPA) PEER OR ADMINISTRATIVE REVIEW AND MAY NOT NECESSARILY REFLECT THE VIEWS OF THE OHIO EPA OR THE U.S. EPA AND NO OFFICIAL ENDORSEMENT SHOULD BE INFERRED.

OWNER



CONSULTANT



APPROVALS

APPROVED: DATE: 11/30/2023
NEAL A. CLARK, PE
DESIGN ENGINEER

APPROVED: DATE: 11/30/2023
GREGORY A. BUHOVECKEY, P.E.
DESIGN ENGINEER

APPROVED: _____ DATE: _____

Design Constructed:	Yes ☐ No ☐	Book	Page
Construction Completion Date:		Record Drawing Date:	

FEDERAL PROJECT NO.

PID NO.

CITY PROJECT NO.

PREPARED FOR
CITY OF TOLEDO

TOLEDO, OHIO

RESTORATION OF THE OTTAWA
RIVER IN JERMAIN PARK

GENERAL CONSTRUCTION NOTES:

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS. THE CURRENT OHIO DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS SHALL GOVERN THE MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THESE PLANS.
- ALL CONSTRUCTION WITHIN A DOT RIGHT OF WAY SHALL COMPLY WITH ALL DEPARTMENT OF TRANSPORTATION STANDARDS.
- WHERE CONFLICT ARISES BETWEEN ALL SPECIFICATIONS (BOOK OR PLAN BASED), THE MORE STRINGENT SPECIFICATION SHALL PREVAIL.
- DATA ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT OHIO UTILITY PROTECTION SERVICE AT 1-800-362-2764 AT LEAST 72 HOURS BEFORE START OF WORK AND VERIFY ALL EXISTING UTILITY LOCATIONS.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER SHOULD ANY DISCREPANCY REGARDING THE PROPOSED WORK OR UNFORESEEN CONDITIONS ARISE PRIOR TO PROCEEDING FURTHER WITH THE AFFECTED WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS FOR THE PROJECT AND NOTIFYING THE OWNER AND ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO CONSTRUCTION.
- ANY DEFECTS DISCOVERED IN NEW CONSTRUCTION, WORKMANSHIP, EQUIPMENT, OR MATERIALS SHALL BE REPAIRED, OR CORRECTED BY APPROVED METHODS AS DIRECTED BY AND AT NO ADDITIONAL COST TO THE OWNER.
- IT IS THE INTENTION OF THE CONTRACT DOCUMENTS TO PROVIDE AND REQUIRE A COMPLETED WORK PROJECT READY FOR OPERATION. ANY WORK ITEMS OMITTED FROM SUCH CONTRACT DOCUMENTS WHICH ARE CLEARLY NECESSARY FOR THE COMPLETION OF SUCH WORK AND ITS APPURTENANCES SHALL BE CONSIDERED A PART OF SUCH WORK ALTHOUGH NOT DIRECTLY SPECIFIED OR CALLED FOR IN THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. THE CONTRACTOR SHALL EXERCISE PRECAUTION ALWAYS FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146.
- THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER AND OWNER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT, AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
- WHEREVER UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED THAT ARE NOT INDICATED ON THE PLANS, THE WORK SHALL BE DISCONTINUED UNTIL THE PROJECT ENGINEER AND OWNER APPROVE THE METHOD AND MATERIALS TO BE INCORPORATED INTO THE WORK.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OR ITS REPRESENTATIVE IF SUSPECTED HAZARDOUS MATERIAL OR ANY OTHER MATERIAL THAT MAY CREATE A HEALTH RISK IS DISCOVERED ON SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PLANT TICKETS FOR ALL MATERIALS DELIVERED TO THE SITE. PLANT TICKETS MUST SHOW NET QUANTITY OF DELIVERED MATERIAL. MATERIAL DELIVERED OR PLACED WITHOUT PLANT TICKETS SHALL BE REMOVED AND PROPERLY DISPOSED AT THE EXPENSE OF THE CONTRACTOR.

PROJECT PHASING:

- THE PROJECT IS SPLIT INTO TWO PHASES: PHASE 1 AND PHASE 2. PHASE 1 IS THE AREA WEST (UPSTREAM) OF MONROE STREET AND A SMALL PLANTING AREA DIRECTLY DOWNSTREAM OF MONROE STREET. PHASE 2 IS THE AREA WEST OF AUBURN AVENUE, DOWNSTREAM OF MONROE STREET.

UNDERGROUND UTILITIES:

THE CONTRACTOR SHALL NOTIFY THE REGISTERED UTILITY PROTECTION SERVICE AND OWNERS OF UNDERGROUND UTILITY FACILITIES IN ACCORDANCE WITH THE CITY OF TOLEDO PART A STANDARDS SECTION 105.07.

THE REGISTERED UTILITY PROTECTION SERVICE AND OWNERS OF THE UNDERGROUND UTILITY FACILITIES IN THE CITY OF TOLEDO ARE LISTED BELOW:

CONTACT OHIO811 BEFORE YOU DIG
800-362-2764 or 811 | GENERAL
800-311-3692 | ADMINISTRATION
PO Box 729
12467 MAHONING AVE
NORTH JACKSON, OH

COLUMBIA GAS OF OHIO, INC.
TOLEDO OPERATIONS CENTER
2901 E. MANHATTAN BLVD.
TOLEDO, OHIO 43611
419-539-6062

MAINTAINANCE OF TRAFFIC NOTES:

- ALL WORK WITHIN RIGHT OF WAY TO INCLUDE TRAFFIC CONTROL IN ACCORD WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND PER ALL HENRY COUNTY REQUIREMENTS. ROAD MUST REMAIN OPEN AT ALL TIMES. CONTRACTOR TO COORDINATE ANY NECESSARY LANE CLOSURES WITH THE COUNTY.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO MINIMIZE INTERFERENCE WITH ADJOINING ROADS AND STREETS, WALKS AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING CONSTRUCTION.
- PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY OWNER OR AUTHORITIES HAVING JURISDICTION.

REMOVALS:

REMOVAL OF ITEMS SHALL BE MADE ONLY TO THE EXTENT APPROVED BY THE ENGINEER.

CONTRACTOR IS REQUIRED TO SUBMIT A LOCATION PLAN INDICATING THE PROPOSED LOCATION OF ALL STOCKPILES AND MUST BE WITHIN THE PROJECT LIMITS.

CONCRETE PAVEMENTS:

THE CONTRACTOR SHALL NOT REMOVE ANY PAVEMENTS OR DRIVEWAYS UNLESS DIRECTED TO DO SO BY THE ENGINEER.

EXISTING SURVEY POINTS:

SURVEY MONUMENTS, BENCH MARKS AND EXISTING POINTS DAMAGED OR DISTURBED BY CONSTRUCTION SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR AT THE CONTRACTOR’S EXPENSE. SHOULD CONTRACTOR FAIL TO PROPERLY REPLACE THESE POINTS, THE DIVISION OF ENGINEERING SERVICES WILL REPLACE THEM AT THE CONTRACTOR’S EXPENSE AFTER THREE WEEKS NOTICE.

ENVIRONMENTAL NOTES:

CONSTRUCTION SHALL NOT BEGIN UNTIL ALL REQUIRED PERMITS HAVE BEEN ACQUIRED. IT WILL BE THE RESPONSIBILITY OF THE CITY OF TOLEDO TO OBTAIN THE NECESSARY CLEAN WATER ACT PERMITS AND FLOODPLAIN AUTHORIZATION. IT SHALL BE THE CITY’S RESPONSIBILITY TO FILE THE NOTICE OF INTENT WITH OHIO EPA.

CLEARING OF TREES GREATER THAN 3 INCHES DIAMETER AT BREAST HEIGHT SHALL BE MINIMIZED TO THE GREATEST EXTENT PRACTICABLE AND SHALL ONLY OCCUR FROM OCTOBER 1 – MARCH 31.

PROTECTION OF EXISTING WETLANDS:

THE CONTRACTOR SHALL AVOID ANY UNNECESSARY DAMAGE TO EXISTING VEGETATION NEAR PROJECT WORK AREAS. NO EXISTING WETLANDS, AS SHOWN ON THE DESIGN PLANS SHALL BE IMPACTED OR DISTURBED AS PART OF THE PROJECT.

THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN WETLANDS: STORAGE OF CONSTRUCTION MATERIALS; DEBRIS OR EXCAVATED MATERIAL; MOVING OR PARKING VEHICLES OR EQUIPMENT; FOOT TRAFFIC; ERECTION OF SHEDS OR STRUCTURES; EXCAVATION OR DIGGING; ATTACHMENT OF SIGNS TO OR WRAPPING MATERIALS AROUND TREES OR PLANTS UNLESS OTHERWISE INDICATED.

WETLANDS WHICH ARE IN IMMEDIATE VICINITY OF THE ROUTE OF CONSTRUCTION SHOULD BE PROTECTED WITH APPROPRIATE BARRIERS, LOCATED FIVE FEET OUTSIDE THE DELINEATED WETLAND BOUNDARY.

THE ENGINEER SHALL BE CONSULTED AND PERMISSION SHALL BE OBTAINED PRIOR TO REMOVAL OF ANY TREE NOT LABELED TO BE REMOVED. THE CONTRACTOR SHALL CONSULT THE ENGINEER WELL IN ADVANCE OF ANY EXCAVATION CONCERNING SUCH REMOVALS. TREES TO BE REMOVED SHALL BE FELLED SO AS TO NOT INJURE TREES TO REMAIN. TREES INDICATED FOR REMOVAL SHALL BE USED AS LOCKED LOGS. WOODY MATERIAL MAYBE TEMPORARILY STORED IN TEMPORARY CONSTRUCTION STAGING AREAS AS INDICATED ON PLANS.

EXISTING CONDITIONS AND DEMOLITION NOTES:

- THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE OWNER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO CONSTRUCTION.
- EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS. IF CONDITIONS ENCOUNTERED ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL IN A LAWFUL MANNER. ALL DEMOLISHED MATERIALS SHALL BE TAKEN FROM THE SITE IMMEDIATELY (UNLESS OTHERWISE NOTED) AND DISPOSED OFF-SITE IN ACCORDANCE WITH ALL LAWS, REGULATIONS AND ORDINANCES. NO BURNING OF ANY MATERIALS WILL BE ALLOWED ON OR OFF SITE. NO CLEARED OR GRUBBED MATERIAL SHALL BE BURIED OR LEFT ON SITE. VEGETATIVE MATERIAL MAY BE CHIPPED AND SPREAD ON-SITE WITH PRIOR APPROVAL FROM THE CITY.
- CONTRACTOR SHALL PERFORM ALL CLEARING, GRUBBING, REMOVAL OF TREES, STUMPS, VEGETATION, AND DEBRIS NECESSARY TO PERFORM THE WORK INDICATED HEREIN. THAT CONTRACTOR SHALL LIMIT LAND DISTURBANCE TO ONLY THAT REQUIRED TO COMPLETE THE PROPOSED IMPROVEMENTS.
- SHOULD ANY UNCHARTED, OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY BEFORE PROCEEDING FURTHER WITH THE WORK IN THIS AREA.
- THE LIMITS OF CLEARING AND GRADING SHALL BE FIELD STAKED 48 HOURS (2 WORKING DAYS) PRIOR TO THE PRE CONSTRUCTION MEETING. AREAS BEYOND THE LIMITS OF CLEARING AND GRADING SHALL NOT BE DISTURBED INCLUDING THE STOCKPILE OF ANY MATERIALS OR CONSTRUCTION TRAFFIC.
- ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING, AND/OR ABATEMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY LISTED ON THE PLANS.
- USE SUITABLE METHODS TO LIMIT DUST AND DIRT TO ADJACENT STRUCTURES OR PROPERTY. CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO EXISTING CONDITIONS PRIOR TO THE START OF THE DEMOLITION WORK.
- THE CONTRACTOR SHALL PROTECT TREES, LANDSCAPING, SITE IMPROVEMENTS, AND OTHER ITEMS NOT SCHEDULED FOR CLEARING, OR THAT MIGHT BE DAMAGED BY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING ANY ITEMS THAT ARE DAMAGED.
- ANY AND ALL DAMAGE TO EXISTING PAVEMENT WITHIN THE LAYDOWN AREA SHALL BE REPAIRED.
- ALL UTILITIES NOT MARKED FOR REMOVAL OR RELOCATION SHALL REMAIN INTACT. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE TO EXISTING UTILITIES NOT MARKED FOR REMOVAL OR RELOCATION AT THEIR SOLE EXPENSE.

SITE MAINTAINANCE AND ENVIRONMENTAL NOTES:

- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY EROSION, POLLUTION, AND DUST CONTROL MEASURES THROUGHOUT THE ENTIRE CONSTRUCTION PROJECT. REFERENCE THE SWPPP PLAN, NOTES AND DETAILS.
- IF MUD, SOIL, OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS, OR OTHER PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH AT THE END OF EACH WORK DAY, OR AS REQUIRED DURING THE WORK DAY.
- ALL ROAD SURFACES, EASEMENTS, OR RIGHT-OF-WAY DISTURBED BY THE CONSTRUCTION OF ANY PART OF THESE IMPROVEMENTS ARE TO BE RESTORED ACCORDING TO THE CITY REQUIREMENTS.
- ALL DISTURBANCE INCURRED TO COUNTY OR STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE CITY, LOCAL, AND/OR STATE DOT.
- THE CONTRACTOR SHALL RESTORE ANY STRUCTURES, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, ETC. WITHIN THE SITE OR ADJOINING PROPERTIES DISTURBED DURING DEMOLITION OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER, LOCAL MUNICIPALITY, AND STATE.

HAUL ROUTES:

ALL HAUL ROADS AND STREETS WITHIN THE PROJECT LIMITS ON WHICH TRAFFIC IS TO BE MAINTAINED SHALL BE KEPT RELATIVELY FREE FROM DUST AND DIRT. IF THEY ARE NOT MAINTAINED TO THE SATISFACTION OF THE ENGINEER, HE/SHE MAY REQUIRE THE USE OF MECHANICAL CLEANING EQUIPMENT TO REMOVE DUST AND PARTICLES FROM THE ROADWAY SURFACE AND MINIMIZE THE CHANCE OF SUCH PARTICLES BECOMING AIR-BORNE.

UNRECORDED SANITARY CONCERNS:

ANY UNRECORDED SANITARY SEWER ENCOUNTERED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.

LANDSCAPE PLAN NOTES:

- THE CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY ON ALL PLANTS AND VEGETATION PROPOSED ON THE LANDSCAPING PLAN. ANY TREES, SHRUBS, GROUND COVER OR OTHER VEGETATION PLANTED AS PART OF THIS PROJECT THAT DO NOT SURVIVE ONE YEAR FROM PLANTING SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL PERTINENT UTILITY COMPANIES THREE WORKING DAYS IN ADVANCE OF ANY DIGGING. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF ANY UTILITIES.
 - REFER TO THE LANDSCAPE PLAN FOR ADDITIONAL NOTES. LANDSCAPE IMPROVEMENTS SHALL CONFORM TO THE LATEST EDITION OF ODOT CONSTRUCTION SPECIFICATIONS.
 - ALL PLANTING MATERIALS: SHALL BE PLANTED PER BID SPECIFICATIONS.
 - CONTRACTOR SHALL PRESERVE EXISTING TREES TO THE GREATEST EXTENT POSSIBLE.
 - MULCH. MULCH ALL PLANTING AREAS PER CMS ITEM 659-STRAW MULCH. SLOPES THAT ARE COVERED WITH THE EROSION CONTROL BLANKET DO NOT REQUIRE ADDITIONAL STRAW MULCH.
 - PERIOD OF ESTABLISHMENT. BEFORE FINAL INSPECTION, PLACE ALL PLANTS AND CARE FOR THEM FOR A PERIOD OF ESTABLISHMENT. THE PERIOD OF ESTABLISHMENT BEGINS IMMEDIATELY UPON COMPLETION OF THE PLANTING OPERATIONS AND CONTINUES UNTIL OCTOBER 1. THE MINIMUM PERIOD OF ESTABLISHMENT IS ONE GROWING SEASON, JUNE 1 THROUGH OCTOBER 1. DURING THE PERIOD OF ESTABLISHMENT, FOLLOW STANDARD HORTICULTURAL PRACTICES TO ENSURE THE VIGOR AND GROWTH OF THE TRANSPLANTED MATERIAL. WATER, REMULCH, RESTAKE, GUY, AND CULTIVATE AS NECESSARY. ON OR ABOUT AUGUST 15, THE ENGINEER WILL INSPECT THE PLANTING AND SUPPLY THE CONTRACTOR WITH A LIST OF MISSING AND DEAD PLANTS AND THOSE THAT HAVE DIED BACK BEYOND NORMAL PRUNING LINES. REPLANT AS REQUIRED ACCORDING TO THE SPECIFICATIONS OF THE ORIGINAL MATERIAL. REPLACEMENT PLANTS ARE SUBJECT TO A NEW PERIOD OF ESTABLISHMENT. IMMEDIATELY REPLACE PLANTS PLANTED INITIALLY IN THE FALL THAT HAVE DIED BEFORE THE SPRING PLANTING SEASON. CARE FOR THE REPLACEMENT PLANTS DURING THE NEW ESTABLISHMENT PERIOD.
 - RESTORATION OF DISTURBED AREAS:
ALL DISTURBED AREAS NOT COVERED BY BUILDING, PAVEMENT OR LANDSCAPE PLANTING BEDS SHALL BE PREPARED AND SEEDED WITH THE FLOODPLAIN SEED MIX (SEE LANDSCAPE PLAN SHEETS), UNLESS WITHIN OR DIRECTLY ADJACENT TO EXISTING LAWN AREAS. DISTURBED AREAS WITHIN OR DIRECTLY ADJACENT TO EXISTING LAWN AREAS SHALL BE PREPARED FOR GRASS SEED AND SEEDED. LOOSEN RUTS AND WORK THE SOIL AREAS TO A MINIMUM OF 6” DEEP PRIOR TO FINE GRADING AND SEEDING WORK. AREAS SEEDED WITH THE FLOODPLAIN SEED MIX SHALL RECEIVE A LAYER OF STRAW MULCH. AREAS TO RECEIVE GRASS SEED SHALL HAVE A MIN. 4” TOPSOIL PLACED, SEEDED AND A STRAW BLANKET COVER PLACED OVER THE SEEDED AREAS PER ODOT SPECIFICATIONS. GRASS AREAS SHALL BE FERTILIZED WITH ONE POUND OF ACTUAL NITROGEN PER 1000 SQUARE FEET WITH A SLOW RELEASE COMMERCIAL STARTER FERTILIZER (LESCO 18-24-12 OR EQUAL).
 - LANDSCAPE TREES, SHRUBS AND PERENNIAL WATERING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, DELIVERING, APPLYING, MEASURING AND SCHEDULING A SUFFICIENT AMOUNT OF WATER NECESSARY TO KEEP EACH PLANT IN A HEALTHY GROWING CONDITION THROUGHOUT THE PERIOD OF ESTABLISHMENT.
 - TURF GROUNDCOVER (SODDING, SEEDING AND SEED MULCHING):
ALL SEEDING INSTALLATION SHALL CONFORM TO ODOT SPECIFICATIONS AND NOTE 8 ABOVE. SEE LANDSCAPE PLAN SHEETS FOR FLOODPLAIN SEED MIX. LAWN AREAS SHALL BE SEEDED AT 6 LBS/1000 SF WITH THE FOLLOWING SEED MIXTURE (ODOT LAWN BLEND):
KENTUCKY 31 TALL FESCUE 40%
PERENNIAL RYE 30%
KENTUCKY BLUEGRASS 30%
- INVASIVE SPECIES NOTES:
- BEFORE AND DURING CONSTRUCTION, THE CONTRACTOR SHALL PERFORM INVASIVE SPECIES TREATMENT IN THE AREAS SHOWN ON THE REMOVAL PLANS. AT LEAST TWO TREATMENT APPLICATIONS SHALL OCCUR PRIOR TO OR DURING CONSTRUCTION. TREATMENT SHALL BE AS PER THE METHODS OUTLINED IN THE BID SPECIFICATIONS.
 - THE CONTRACTOR SHALL PROVIDE ONE YEAR OF FOLLOW-UP INVASIVE SPECIES TREATMENT FOR THE OVERALL PROJECT AREA, INCLUDING THE NEWLY PLANTED AREAS AND THE PREVIOUSLY TREATED AREAS. TREATMENT SHALL BE AS PER THE METHODS OUTLINED IN THE BID SPECIFICATIONS.
- LAYOUT NOTES:
- THE CONTRACTOR SHALL CONFINE THEIR ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHT-OF-WAYS, AND CONSTRUCTION AND PERMANENT EASEMENTS, AND SHALL NOT TRESPASS UPON OTHER PROPERTY WITHOUT THE WRITTEN CONSENT OF THE OWNER.
 - THE CONTRACTOR SHALL MAKE THEIR OWN PROVISIONS TO PROVIDE A SITE STAGING AREA AND JOB TRAILER (IF REQUIRED) FOR THE PROJECT IMPROVEMENTS.
 - THE CONTRACTOR SHALL REFERENCE ALL IRON PINS OR MONUMENTS. IF ANY PINS OR MONUMENTS ARE DESTROYED OR DAMAGED BY THE CONTRACTOR, THEY SHALL BE ACCURATELY REPLACED BY A REGISTERED SURVEYOR IN THE STATE OF OHIO AT THE COMPLETION OF THE PROJECT.

GENERAL GRADING NOTES:

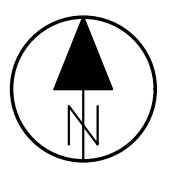
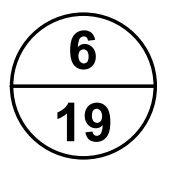
- PROPOSED ELEVATIONS SHOWN SHALL NOT BE CHANGED WITHOUT APPROVAL OF THE ENGINEER AND THE CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS.
- THE CONTRACTOR SHALL BE ADVISED THAT ALL EXCAVATION IS CONSIDERED UNCLASSIFIED AND THAT IT SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS, AND MATERIALS OF CONSTRUCTION TO COMPLETE CONSTRUCTION AS DESIGNED. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OFF-SITE DISPOSAL OF ANY AND ALL EXCESS OR UNSUITABLE MATERIAL UNABLE TO BE PLACED ON SITE.
- SPOIL AREAS SHALL BE GRADED SMOOTH.
- IT IS THE CONTRACTORS OBLIGATION AND RESPONSIBILITY TO CONFIRM/CONCUR WITH THE EXISTING GRADES SHOWN HEREIN. THE CONTRACTOR MUST CONFIRM ALL EXISTING GRADES PRIOR TO ANY/ALL EXCAVATION.
- THE CONTRACTOR MUST DOCUMENT EXISTING GRADE DISPUTES BY PROVISION OF A TOPOGRAPHIC SURVEY BY A STATE OF OHIO REGISTERED PROFESSIONAL SURVEYOR, PRIOR TO ANY EARTH DISTURBING ACTIVITIES. IN THE ABSENCE OF THE PROVISION OF TOPOGRAPHIC SURVEY BY THE CONTRACTOR, THE GRADES SHOWN HEREON WILL BE THE "TOPOGRAPHY OF RECORD" FOR ANY AND ALL SOIL VOLUME DISPUTES.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EXPORT NECESSARY TO ACHIEVE THE PROPOSED GRADES

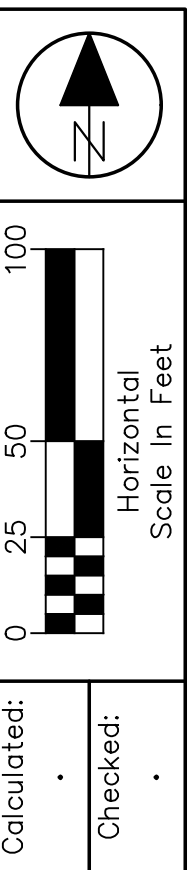
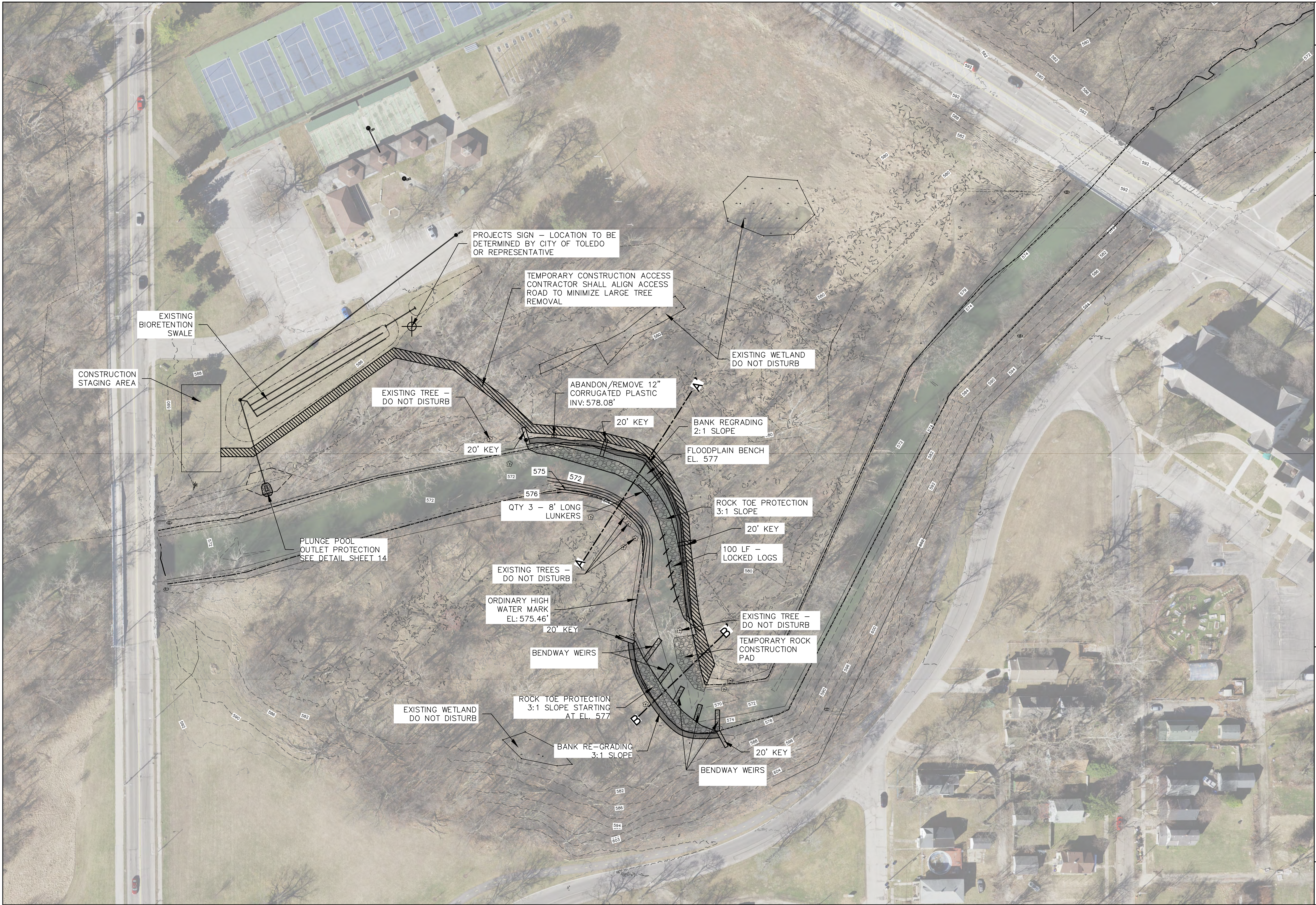
General Summary – Phase 1				
Item No.	State Item No.	Quantity	Unit	Description
1	624	1	LUMP	MOBILIZATION
2	624	1	LUMP	CONSTRUCTION STAKING
3	SPEC	1	LUMP	SWPPP MONITORING AND MISC
4	SPEC	1	EACH	PROJECT INFORMATIONAL SIGN
5	SPEC	540	LF	FILTER SOCK
6	SPEC	65	LF	TURBIDITY CURTAIN
7	SPEC	1	EACH	CONSTRUCTION ENTRANCE
8	201	1	LUMP	CLEARING AND GRUBBING
9	SPEC	2	EACH	ON-SITE TREE REMOVAL – TO BE USED FOR HABITAT FEATURES
10	SPEC	1	LUMP	INITIAL INVASIVE SPECIES TREATMENT (MINIMUM OF TWO APPLICATIONS)
11	SPEC	1	LUMP	ONE YEAR OF FOLLOW-UP INVASIVE SPECIES TREATMENT
12	202	60	LF	REMOVE, CAP AND DISPOSE OF 12-INCH PLASTIC PIPE
13	653	430	CY	TOPSOIL FURNISHED AND PLACED (LAWN AREAS)
14	203	1	LS	EARTHWORK PHASE 1 (305 CY CUT, 1074 CY FILL)
15	SPEC	5	EACH	LOCKED LOG
16	SPEC	3	EACH	LUNKER (8FT WIDE)
17	SPEC	1	LUMP	TEMPORARY CONSTRUCTION PAD, 50 MIX OF NO.1 & NO.2 STONE
18	601	641	CY	RIPRAP ODOT TYPE C (PHASE 1 ROCK BANK PROTECTION)
19	601	10	CY	RIPRAP ODOT TYPE C (PLUNGE POOL)
20	703.19	35	CY	ROCK ODOT TYPE B CHOKED WITH 80 MIX OF NO.1 AND NO.2 STONES (BENDWAY WEIRS)
21	703.19	130	CY	ROCK ODOT TYPE B CHOKED WITH SOIL (VEGETATED KEYS)
22	SPEC	63	EACH	BARE ROOT SHRUB–1’ MINIMUM HEIGHT
23	SPEC	165	EACH	LIVE STAKES – 4 FEET LONG, 1”–1.5” DIAMETER
24	SPEC	1986	EACH	LIVE WHIP – 6 FEET LONG, 3/8” – 1” DIAMETER
25	SPEC	0.4	AC	FLOODPLAIN SEED MIX
26	659	1300	SY	LAWN SEED MIX
27	SPEC	420	SY	EROSION CONTROL MAT
28	SPEC	20	EACH	HERBIVORY PROTECTION – PHASE 1 (INDIVIDUAL TREE TUBES)

General Summary – Phase 2				
Item No.	State Item No.	Quantity	Unit	Description
29	SPEC	580	LF	FILTER SOCK
30	SPEC	65	LF	TURBIDITY CURTAIN
31	SPEC	1	EACH	CONSTRUCTION ENTRANCE
32	201	1	LUMP	CLEARING AND GRUBBING
33	SPEC	1	EACH	ON-SITE TREE REMOVAL – TO BE USED FOR HABITAT FEATURES
34	SPEC	1	LUMP	INITIAL INVASIVE SPECIES TREATMENT (MINIMUM OF TWO APPLICATIONS)
35	SPEC	1	LUMP	ONE YEAR OF FOLLOW-UP INVASIVE SPECIES TREATMENT
36	203	1	LS	EARTHWORK PHASE 2 (2480 CY CUT, 0 CY FILL)
37	203	2000	CY	TRANSPORT 200 CY OF EARTHEN MATERIAL FOR OFF-SITE DISPOSAL
38	SPEC	10	EACH	LOCKED LOG
39	SPEC	3	EACH	36” HABITAT BOULDER
40	601	772	CY	RIPRAP ODOT TYPE C (PHASE 2 ROCK BANK PROTECTION)
41	703.19	56	CY	ROCK ODOT TYPE B CHOKED WITH SOIL (VEGETATED KEYS)
42	SPEC	490	EACH	BARE ROOT TREE–2’ MINIMUM HEIGHT
43	SPEC	2120	EACH	LIVE WHIP – 6 FEET LONG, 3/8” – 1” DIAMETER
44	SPEC	2.6	AC	FLOODPLAIN SEED MIX
45	SPEC	800	SY	EROSION CONTROL MAT
46	ALT A	510	EACH	HERBIVORY PROTECTION EAST RIPARIAN AREA: INDIVIDUAL TREE TUBES
47	ALT B	1400	EACH	HERBIVORY PROTECTION EAST RIPARIAN AREA: TEMPORARY DEER FENCING

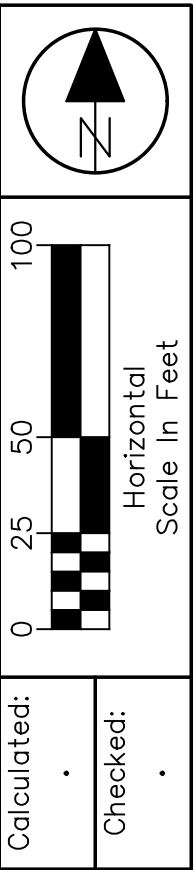




 0 25 50 100 Horizontal Scale in Feet	REMOVAL PLAN PHASE 2	OTTAWA RIVER JERMAIN PARK RESTORATION	

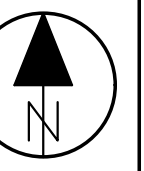
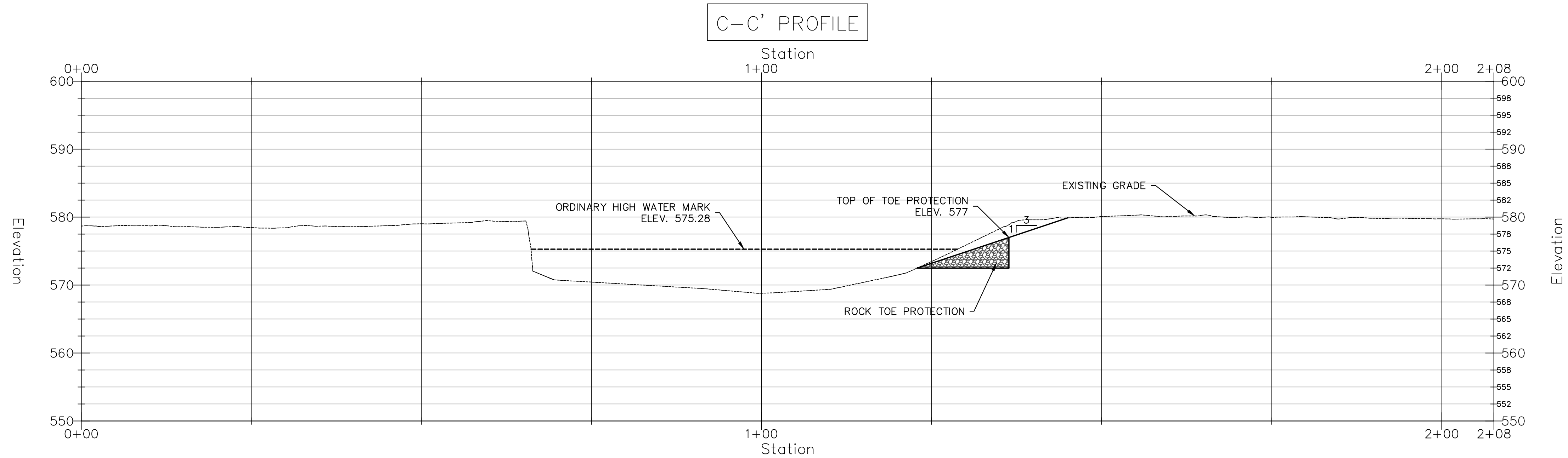
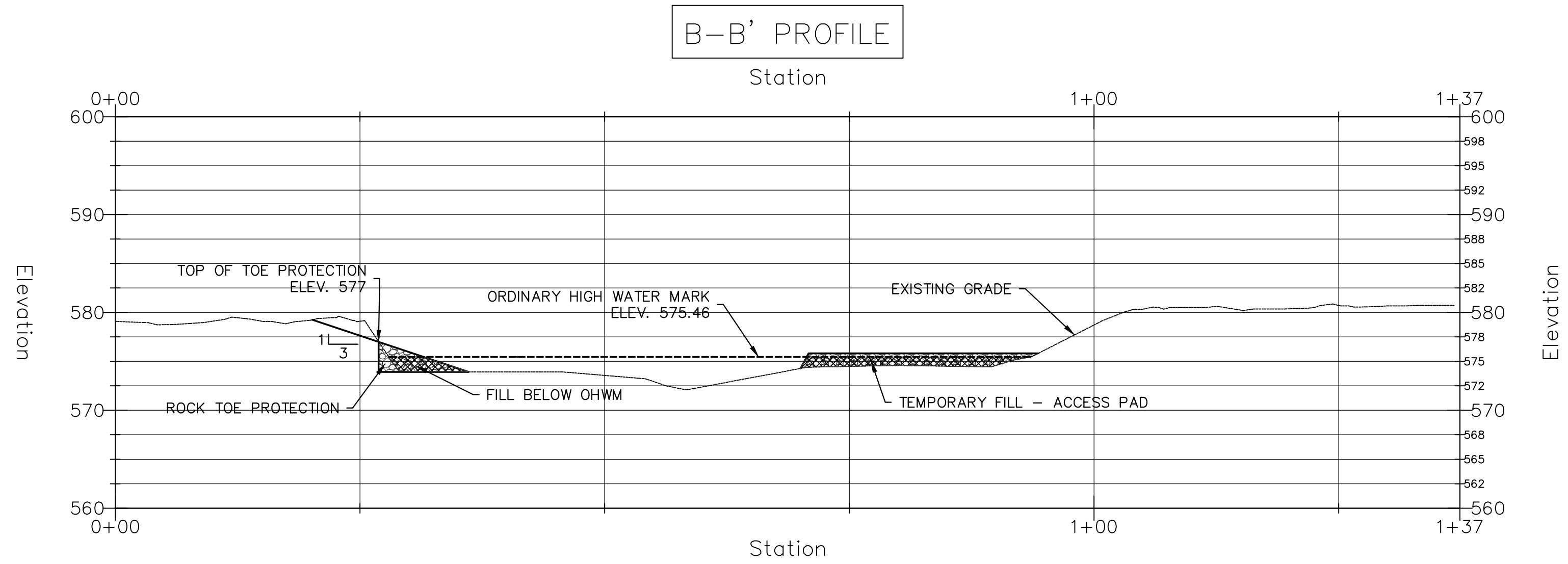
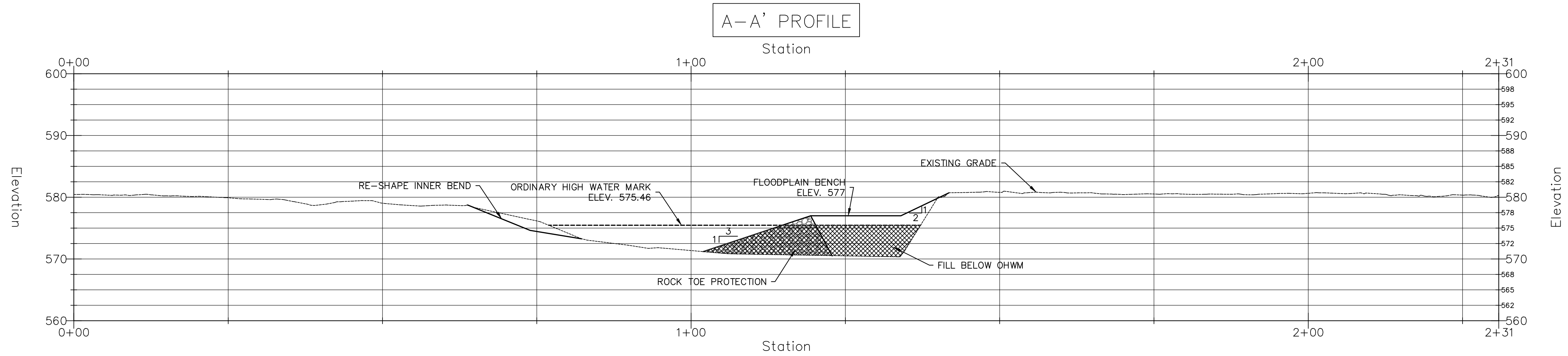


RESTORATION PLAN PHASE 1



RESTORATION PLAN PHASE 2

OTTAWA RIVER
JERMAIN PARK
RESTORATION



Calculated: .
Checked: .

RESTORATION PLAN CROSS SECTIONS

**OTTAWA RIVER
JERMAIN PARK
RESTORATION**



CONSTRUCTION STAGING AREA

CONSTRUCTION ENTRANCE

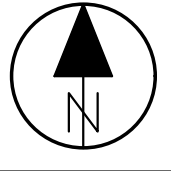
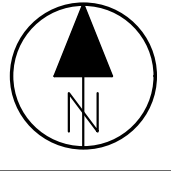
FILTER SOCK

FILTER SOCK

TURBIDITY CURTAIN

SILT FENCE/STRAW WATTLE/FILTER SOCK

TEMPORARY CONSTRUCTION ACCESS
CONTRACTOR SHALL ALIGN ACCESS
ROAD TO MINIMIZE LARGE TREE
REMOVAL

 0 25 50 100 Horizontal Scale in Feet	Calculated: . Checked: .	STORM WATER POLLUTION PREVENTION PLAN PHASE 1	OTTAWA RIVER JERMAIN PARK RESTORATION	 0 25 50 100 Horizontal Scale in Feet



SEDIMENT AND EROSION CONTROL NOTES:

1. THE STORM WATER POLLUTION PREVENTION PLAN AND DETAILS SHALL BE AVAILABLE FOR INSPECTION ON SITE DURING WORKING HOURS.
2. CONTRACTOR SHALL MAINTAIN A LOG DOCUMENTING GRADING AND STABILIZATION ACTIVITIES AS WELL AS AMENDMENTS TO THE STORM WATER POLLUTION PLAN, WHICH OCCUR AFTER CONSTRUCTION ACTIVITIES COMMENCE.
3. MINIMIZE TRACKING OF SEDIMENTS BY VEHICLES BY UTILIZING THE CONSTRUCTION ENTRANCE AS THE ONLY ENTRANCE FOR VEHICLES. MAINTAIN THIS ENTRANCE WITH STONE AS NEEDED TO PREVENT DIRT AND MUD FROM TRACKING ONTO THE ROADWAY. REGULAR SWEEPING OF THE ROADWAY MAY BE NECESSARY TO ENSURE ROADWAY DOES NOT BUILD UP WITH SEDIMENTS.
4. THE OWNER OF RECORD MUST PROVIDE REGULAR INSPECTION AND MAINTENANCE FOR ALL EROSION AND SEDIMENT CONTROL PRACTICES. PERMANENT RECORDS OF ALL MAINTENANCE AND INSPECTIONS MUST BE KEPT THROUGHOUT THE CONSTRUCTION PERIOD. INSPECTION MUST BE MADE A MINIMUM OF ONCE EVERY SEVEN (7) DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THAN 0.5 INCHES OF RAIN WITHIN A 24-HOUR PERIOD. THE NAME OF OWNERS DESIGNATED INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTIONS AND CORRECTIVE MEASURES TAKEN MUST BE NOTED ON ALL INSPECTIONS. INSPECTION RECORDS SHALL BE KEPT FOR 3 YEARS AFTER TERMINATION OF CONSTRUCTION ACTIVITIES. NON SEDIMENT POND BMPs SHALL BE REPAIRED WITHIN 3 DAYS OF INSPECTION, AND SEDIMENT PONDS SHALL BE REPAIRED OR CLEANED OUT WITHIN 10 DAYS OF INSPECTION. BMPs MISSING OR NOT MEETING THE INTENDED FUNCTION SHALL BE REPLACED/INSTALLED WITHIN 10 DAYS OF INSPECTION.
5. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS AND MAY BE REQUIRED AT THE DISCRETION OF THE COUNTY SOIL AND WATER CONSERVATION DISTRICT OR ITS REPRESENTATIVES.
6. SEDIMENT/STORMWATER PONDS AND EROSION AND SEDIMENT CONTROLS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING. UPON COMPLETION OF CONSTRUCTION OF PONDS, SEEDING AND MULCHING SHALL IMMEDIATELY FOLLOW TO AID IN THE STABILIZATION AND MINIMIZE EROSION AND SEDIMENT TRANSPORT OF THE SOIL BEFORE WATER LEAVES THE POND. ALL EROSION AND SEDIMENT CONTROLS SHALL CONTINUE TO FUNCTION UNTIL DISTURBED AREAS ARE RESTABILIZED. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.
7. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF. (THIS INCLUDES WASHING OUT OF CEMENT TRUCKS.) DESIGNATED WASH PIT AREAS ARE SHOWN ON THE PLANS AND ARE PRESET FOR THIS PURPOSE AWAY FROM AREAS OF STORM WATER RUNOFF.
8. SITE STABILIZATION EITHER PERMANENT OR TEMPORARY MUST FOLLOW THE APPLICABLE FOLLOWING REQUIREMENTS:
- 8.1. PERMANENT STABILIZATION:
- 8.1.1. ANY AREA THAT WILL LIE DORMANT FOR ONE YEAR OR MORE MUST BE STABILIZED WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE.
- 8.1.2. ANY AREA WITHIN 50 FEET OF A WATERCOURSE AND AT FINAL GRADE. MUST BE STABILIZED WITHIN 2 DAYS OF REACHING FINAL GRADE.
- 8.1.3. ANY AREA AT FINAL GRADE. MUST BE STABILIZED WITHIN 7 DAYS OF REACHING FINAL GRADE WITHIN THAT AREA.
- 8.2. TEMPORARY STABILIZATION:
- 8.2.1. ANY DISTURBED AREA WITHIN 50 FEET OF A WATERCOURSE AND NOT AT FINAL GRADE MUST BE STABILIZED WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE, IF THAT AREA WILL REMAIN IDLE FOR MORE THAN 21 DAYS.
- 8.2.2. FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREA, INCLUDING SOIL STOCKPILES, THAT WILL BE DORMANT FOR MORE THAN 21 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A WATERCOURSE MUST BE STABILIZED WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.
- 8.2.3. DISTURBED AREAS THAT WILL BE IDLE OVER THE WINTER MUST BE STABILIZED BEFORE NOVEMBER 1.
- 8.3. WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLOYED. THESE TECHNIQUES MAY INCLUDE MULCHING, EROSION MATTING, OR PLACEMENT OF STONE.
9. THE CONTRACTOR SHALL LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY EXCAVATION, BORROW, AND FILL OPERATIONS AND PROVIDE IMMEDIATE PERMANENT OR TEMPORARY CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, OR OTHER AREAS OF WATER IMPOUNDMENT.
10. THIS WORK SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED IN THE PLANS OR ORDERED BY THE ENGINEER DURING THE LIFE OF THE CONTRACT TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH USE OF BEST MANAGEMENT PRACTICES AS DETAILED IN THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL.
11. TEMPORARY CONTROL MEASURES WILL BE USED WHEN AND AS DIRECTED BY THE ENGINEER TO CORRECT CONDITIONS THAT DEVELOP DURING CONSTRUCTION THAT WERE NOT FORESEEN DURING THE DESIGN STAGE, THAT ARE NEEDED PRIOR TO INSTALLATION OF PERMANENT CONTROL FEATURES, OR THAT ARE NEEDED TEMPORARILY TO CONTROL EROSION THAT DEVELOPS DURING NORMAL CONSTRUCTION PRACTICES.
12. EXISTING VEGETATIVE GROWTH SHALL REMAIN UNDISTURBED AS LONG AS POSSIBLE. THE CONTRACTOR SHALL SEED AND MULCH ALL AREAS DISTURBED.
13. TEMPORARY EROSION CONTROL FEATURES SHALL BE ACCEPTABLY MAINTAINED AND SHALL SUBSEQUENTLY BE REMOVED OR REPLACED WHEN DIRECTED BY THE ENGINEER. TEMPORARY AND PERMANENT EROSION CONTROL FEATURES SHALL BE CHECKED AFTER EACH MEASURABLE RAINFALL AND RE-ESTABLISHED AS NECESSARY. REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE SITE.
14. CONTRACTOR IS TO PROVIDE SPECIFIC LOCATIONS FOR THE PROPER CROSSING OF DIVERSION SWALES WITH VEHICLES AND EQUIPMENT. AT THESE LOCATIONS THE DIVERSION SWALES SHALL BE PROTECTED FROM INCURRING DAMAGE FROM THE VEHICLES AND EQUIPMENT. IF ANY DAMAGE IS TO OCCUR THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING SAID DAMAGE IMMEDIATELY, PRIOR TO CONTINUATION OF WORK ON SITE.
15. IN THE EVENT THAT TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED DUE TO THE CONTRACTOR'S NEGLIGENCE, CARELESSNESS, OR FAILURE TO INSTALL PERMANENT CONTROLS AS A PART OF THE WORK AS SCHEDULED, AND ARE ORDERED BY THE ENGINEER, SUCH TEMPORARY WORK SHALL BE PERFORMED BY THE CONTRACTOR AT HIS EXPENSE.
16. TEMPORARY SEEDING SPECIFICATIONS OUTSIDE WETLAND RESTORATION AREA:

SEEDING DATES	SEED TYPE	APPLICATION RATE (PER 1000 sq. ft.)
MARCH 1 - AUGUST 15	OATS OR PERENNIAL RYE GRASS TALL FESCUE	3# 1#
AUGUST 16 - NOVEMBER 1	RYE, WHEAT OR PERENNIAL RYE GRASS TALL FESCUE	3# 1#
AFTER NOVEMBER 1	STRAW OR HAY MULCH	2-3 BALES
SEED BED PREPARATION	LIME 10-10-10 or 12-12-12 FERTILIZER	100# 12-15#

THE CONTRACTOR SHALL MAINTAIN ALL SEEDED, MULCHED AREAS UNTIL FINIAL INSPECTION. MAINTENANCE SHALL ALSO INCLUDE REPAIRING ANY AREAS DAMAGED FOLLOWING THE SEEDING OR MULCHING OPERATION DUE TO WIND, WATER, FIRE, OR OTHER CAUSES. SUCH DAMAGED AREAS SHALL BE REPAIRED TO RE-ESTABLISH THE CONDITION OF THE GRADE OF THE AREA PRIOR TO SEEDING AND SHALL THEN BE RE-FERTILIZED RE-SEEDED, RE-MULCHED AS DIRECTED BY THE PROJECT ENGINEER.

ALL DISTURBED AREAS NOT DESIGNATED TO RECEIVE A FINISHED SURFACE SHALL BE SEEDED WITH FLOODPLAIN SEED MIX (SEE LANDSCAPE PLAN), MULCHED AND FERTILIZED PER ODOT SPECIFICATION 816. ALL LAWN AND PLANTER AREAS SHALL RECEIVE A MINIMUM OF 4" TOPSOIL. FINAL GRADES AS INDICATED ON THE DRAWINGS.

IMMEDIATELY AFTER SEEDING, MULCH ALL SEEDED AREAS WITH UNWEATHERED SMALL GRAIN STRAW AND SPREAD UNIFORMLY AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE OR 100 POUNDS (2 TO 3 BALES) PER 1,000 SQUARE FEET. THIS MULCH SHOULD BE ANCHORED WITH A DISC-TYPE ANCHORING TOOL OR OTHER MEANS.

17. INSTALL SILT FENCE OR COMBINATION BARRIERS AT LOCATIONS SO INDICATED ON THE STORMWATER POLLUTION PREVENTION PLAN (SEE DETAIL). PROVIDE FOR TEMPORARY SEDIMENT CONTROL AT STOCKPILES (TEMPORARY AND EXCESS) BY PLACING SILT FENCE AROUND STOCKPILES.
18. SILT FENCE TO BE PLACED AROUND ALL YARD DRAINS TO MINIMIZE SILTING OF PIPE AND TRANSPORT OF SILT (SEE DETAIL).
19. INSTALL DANDY BAGS ON INLETS IN PAVEMENT.
20. INSTALL TEMPORARY AGGREGATE PAD AT POINT OF INGRESS AND EGRESS FROM PROJECT TO PREVENT VEHICULAR TRACKING OFF-SITE (SEE DETAIL). THE PAD SHALL BE CLEANED AND REPLENISHED, AS NECESSARY, DURING THE CONSTRUCTION PERIOD.
21. TOPSOIL STOCKPILES SHALL RECEIVE TEMPORARY SEEDING AND MULCHING AS SOON AS STOCKPILING OPERATIONS ARE COMPLETED OR A SILT FENCE OR FILTER SOCK SHALL BE INSTALLED ALONG AND 20 FEET FROM THE TOE OF THE STOCKPILE. TOPSOIL SHALL BE REPLACED AS QUICKLY AS CONSTRUCTION PERMITS.
22. ADDITIONAL EROSION CONTROLS MAY BE MANDATED BY THOSE AGENCIES HAVING JURISDICTION.
23. ROUTINE INSPECTION WILL BE CONDUCTED ON ALL EROSION CONTROL PRACTICES FOR THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR CORRECTING ALL DEFICIENCIES REVEALED BY THE INSPECTIONS.
24. ALL EROSION CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO EPA GENERAL CONSTRUCTION PERMIT REQUIREMENTS.
25. THIS SITE IS COVERED UNDER OHIO EPA GENERAL PERMIT OHC000006 FOR STORM WATER POLLUTION ASSOCIATED WITH CONSTRUCTION.
26. THE GENERAL LOCATION OF THE STAGING AREA IS NOT SHOWN. THE STAGING AREA SHALL BE ESTABLISHED ON 12" OF GRANULAR AGGREGATE BASE. IF AN AGGREGATE BASE COURSE IS USED, THEN THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE STONE SUCH THAT IT IS REPLENISHED WHEN THE DEPTH IS LESS THAN 6" OR REMOVED AND REPLACED IF THE STONE BECOMES LADEN WITH MUD.
27. A SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE GROUND STORAGE TANK (AST) OF 660 GALLONS OR MORE, TOTAL ABOVE GROUND TANK STORAGE OF 1330 GALLONS, OR BELOW GROUND STORAGE OF 42,000 GALLONS OF FUEL.

WASTE DISPOSAL

28. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE A MINIMUM OF ONE SOLID WASTE DISPOSAL RECEPCTACLE AND HAVE THIS RECEPCTACLE EMPTIED BY A CONTRACT TRASH DISPOSAL SERVICE AND HAULED AWAY FROM THE SITE AS NECESSARY. NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS ARE ALLOWED TO BE DISCHARGED FROM THE SITE WITH STORM WATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE MAJOR CONSTRUCTION ACTIVITIES, MUST BE COLLECTED AND PLACED IN THESE RECEPCTACLES. THE LOCATION IS TO BE DETERMINED IN THE FIELD. ALL CONTAINERS MUST BE COVERED AND LEAK-PROOF.

SPILL REQUIREMENTS

29. SHOULD AN ACCIDENTAL SPILL OCCUR, IMMEDIATE ACTION WILL BE UNDERTAKEN BY THE GENERAL CONTRACTOR TO CONTAIN AND REMOVE THE SPILLED MATERIAL IMMEDIATELY AND BE DISPOSED OF BY THE CONTRACTOR IN THE MANNER SPECIFIED BY LOCAL, STATE, AND FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS, AS SOON AS POSSIBLE. ALL SPILLS >25 GALLONS SHALL BE REPORTED TO THE APPROPRIATE STATE AND LOCAL AGENCIES, THIS SHALL INCLUDE THE OHIO EPA AT 800-282-9378, THE LOCAL FIRE DEPARTMENT, THE NATIONAL RESPONSE CENTER AT 800-424-8802, US COAST GUARD 440-288-1206 (IF APPLICABLE), AND THE LUCAS COUNTY OFFICE OF EMERGENCY MANAGEMENT & HOMELAND SECURITY 419-213-6503.

30. ALL CONTAMINATED SOILS MUST BE TREATED AND/OR DISPOSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES (TSDFs), NON-SEDIMENT POLLUTION CONTROLS. CONTRACTOR SHALL CONSTRUCT BERMS, TRENCHES OR PITTS TO COLLECT CONTAMINATED RUNOFF OR COVER CONTAMINATION WITH TARPS OR OTHER METHODS TO PREVENT ANY CONTAGE WITH CONTAMINATED SOILS.

31. THE CONTRACTOR IS RESPONSIBLE FOR ALL NON-SEDIMENT POLLUTION CONTROLS AT THIS SITE, WHICH PROHIBIT NON-SEDIMENT POLLUTANTS FROM DISCHARGING INTO RUNOFF OR INTO THE GROUND AND MUST DISPOSE OF THEM IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATORY AUTHORITIES. IT IS PROHIBITED TO BURN, BURY, OR POUR OUT ONTO THE GROUND, DITCH OR INTO A STORM SEWER, SOLVENTS, PAINTS, STAINS, GASOLINE, DIESEL FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTIFREEZE, CEMENT, CURING COMPOUND AND OTHER SUCH TOXIC OR HAZARDOUS WASTE. STORAGE TANKS SHALL BE LOCATED IN DIKED AREAS AWAY FROM DRAINAGE CHANNELS AND THE DIKED AREA SHOULD HOLD A VOLUME OF 110% OF THE LARGEST TRUCK OR TANK, SHOULD THE CONTRACTOR FAIL TO PREVENT NON-SEDIMENT POLLUTION AT THIS SITE, HE MUST IMMEDIATELY REMEDIATE THE SITE TO LOCAL, STATE AND FEDERAL REGULATORY AUTHORITIES APPROVAL AT HIS OWN EXPENSE.

32. CONTRACTOR MAY NOT USE OIL AS A DUST SUPPRESSANT.

CONSTRUCTION FILL, DEMOLITION DEBRIS & CHEMICAL COMPOUNDS

33. THE CONTRACTOR IS RESPONSIBLE TO PREVENT DISCHARGE OF WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS FROM MIXING WITH RUN-OFF AND LEAVING THE SITE. THE CONTRACTOR SHALL SIZE THE CONCRETE WASHOUT PIT TO HANDLE HIS PROPOSED CONCRETE OPERATIONS AND SHALL MAINTAIN THE PIT SUCH THAT ALL CONCRETE TRUCKS CAN USE IT TO WASHOUT. ALL CURED RESIDUE FROM THE PIT SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. A GENERAL LOCATION FOR THE WASHOUT PIT IS SHOWN ON THE PLAN AND MAY BE MOVED TO BETTER FIT THE CONTRACTOR'S METHODS.

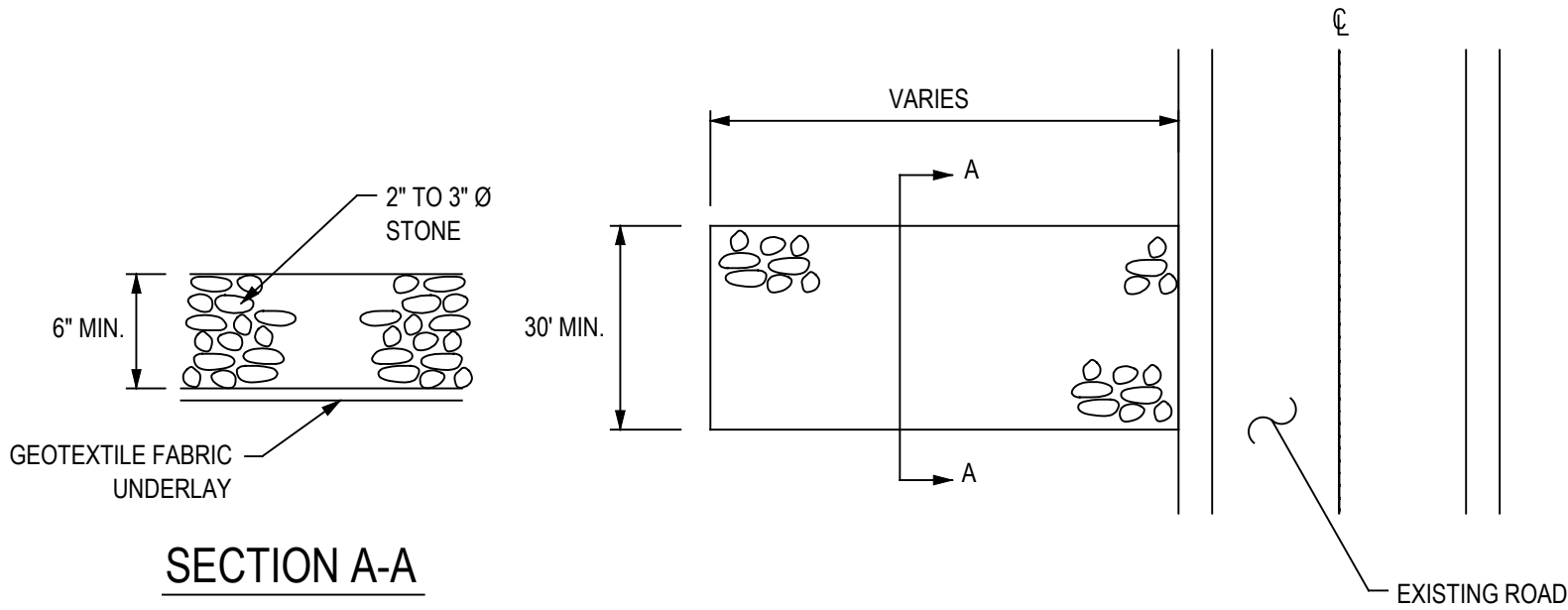
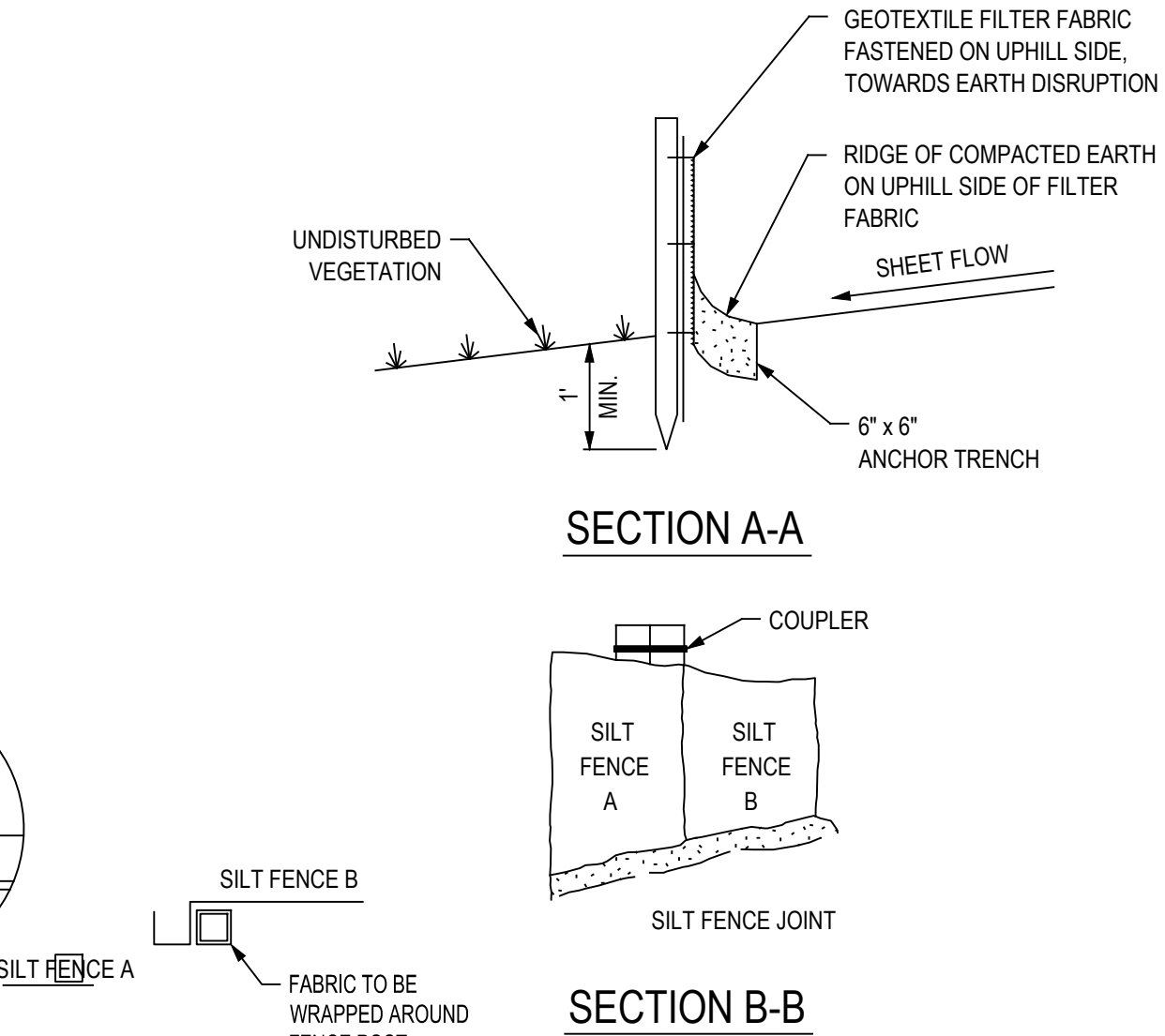
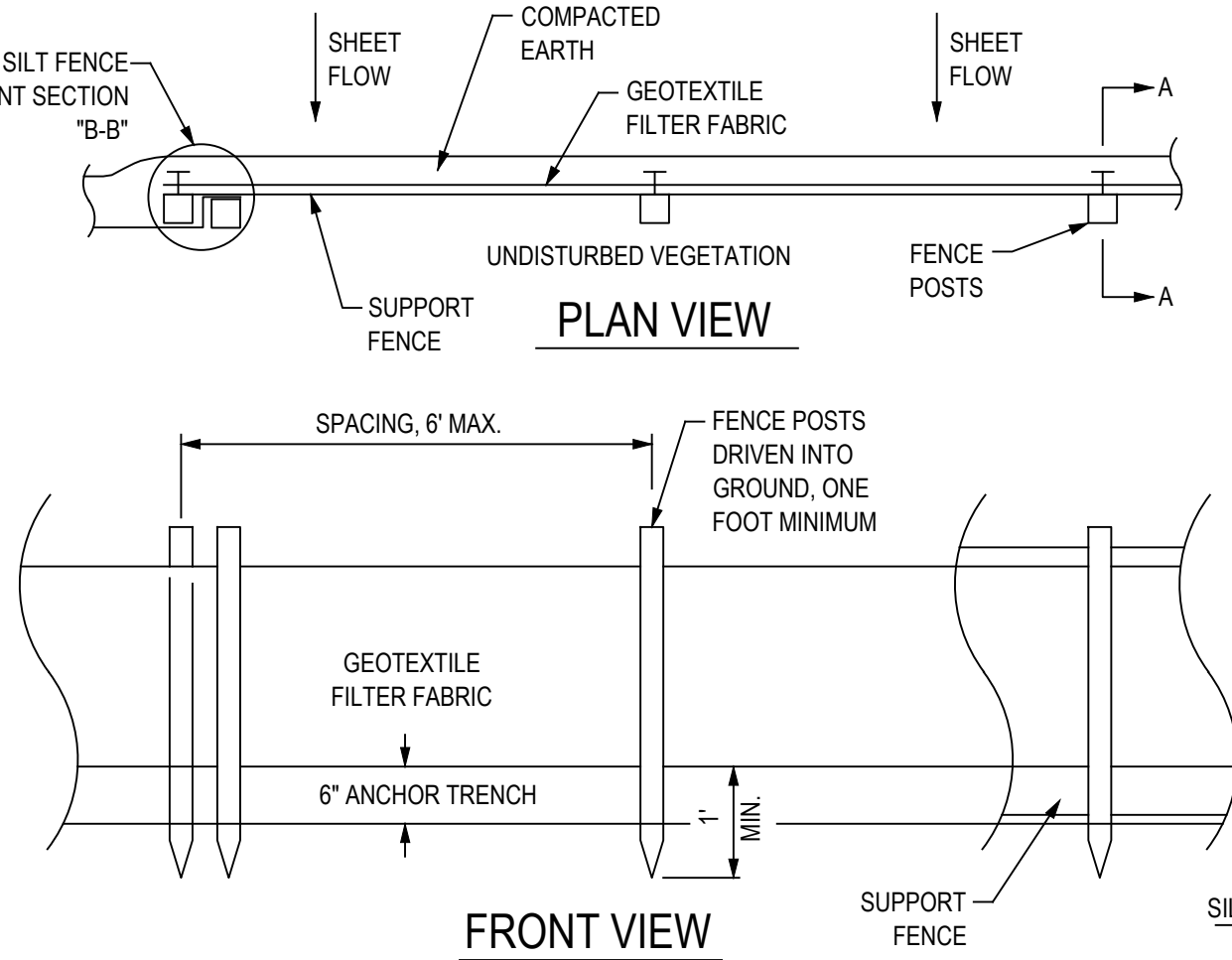
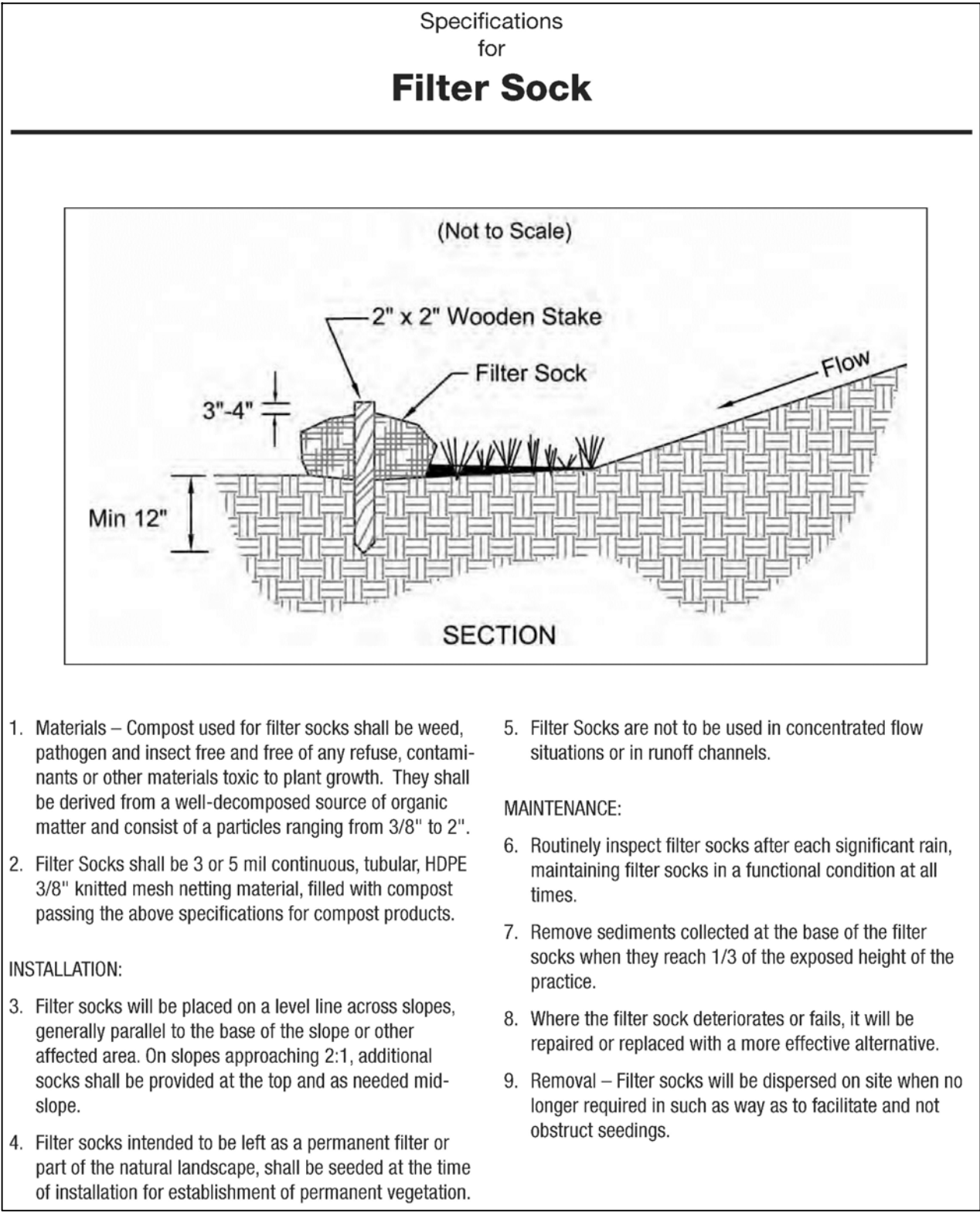
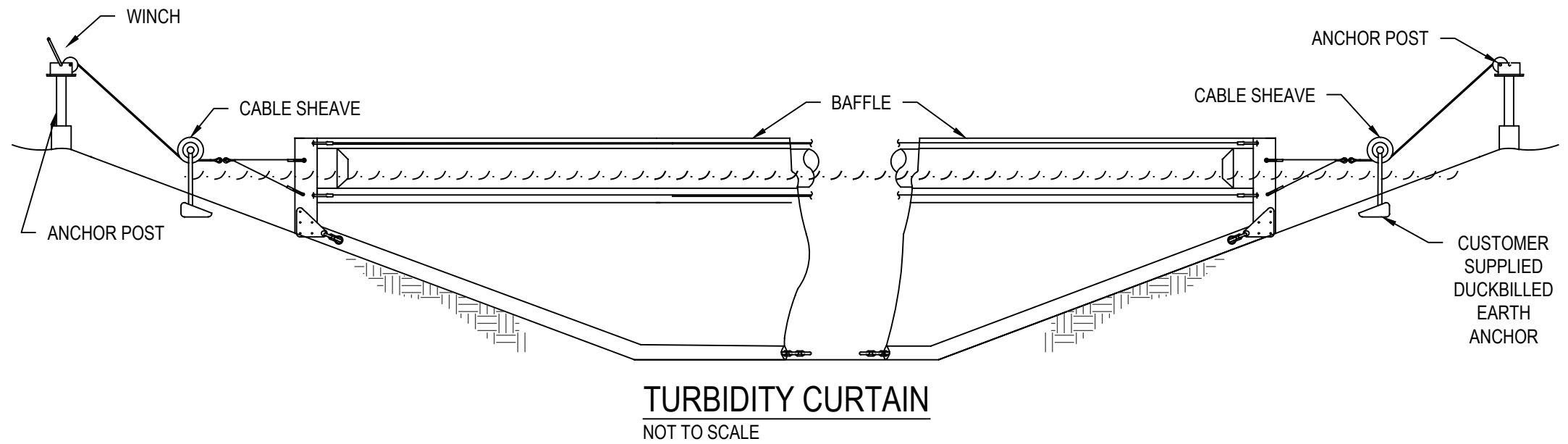
34. ALL CONSTRUCTION AND DEMOLITION DEBRIS (C&DD) WASTE WILL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE(ORC)3714. MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR POLLUTION REGULATIONS (SEE OHIO ADMINISTRATIVE CODE (OAC) 3745-20).

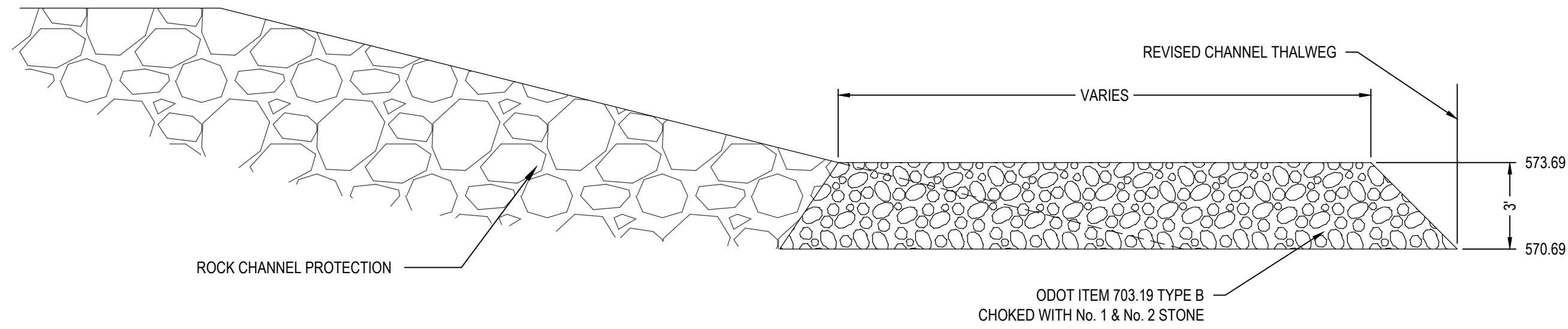
35. SOIL EROSION AND SEDIMENTATION BEST MANAGEMENT PRACTICE (BMP) MEASURES WILL BE INSTALLED PRIOR TO START OF ANY CONSTRUCTION AND WILL BE MAINTAINED AT ALL TIMES UNTIL CONSTRUCTION HAS BEEN COMPLETED, INCLUDING ALL GRASS BEING WELL ESTABLISHED AND/OR PERMANENT EROSION AND SEDIMENTATION BMP MEASURES ARE IN PLACE. ALL BMP MEASURES WILL BE INSTALLED TO THE SATISFACTION OF THE CITY OF OREGON. THE CITY OF OREGON MAY REQUIRE WORK TO BE STOPPED AND THE STORM DRAINAGE OUTLET TO BE PLUGGED, IF CONDITIONS BECOME UNSATISFACTORY.

36. CONTRACTOR IS TO NOTIFY CITY OF TOLEDO THREE DAYS PRIOR TO STARTING CONSTRUCTION FOR PURPOSE OF MONITORING EROSION AND BMP MEASURES.

37. CONTRACTOR IS TO DESIGNATE A SITE DUMP/WASH AREA PRIOR TO STARTING CONSTRUCTION FOR SUCH PURPOSES AS WASHING OUT CONCRETE TRUCKS AND DUMPING NON-HAZARDOUS WASTE MATERIALS. SUBJECT TO THE SUPERVISION OF THE CITY OF OREGON, AND THE CITY OF OREGON MUNICIPAL CODE, DUMPING OR DISCHARGE OF ANY WASTE MATERIALS TO ANY PUBLIC SEWERS OR DITCHES IS PROHIBITED. HAZARDOUS WASTES ARE TO BE REMOVED OFF SITE AND PROPERLY DISPOSED OF CONSISTENT WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

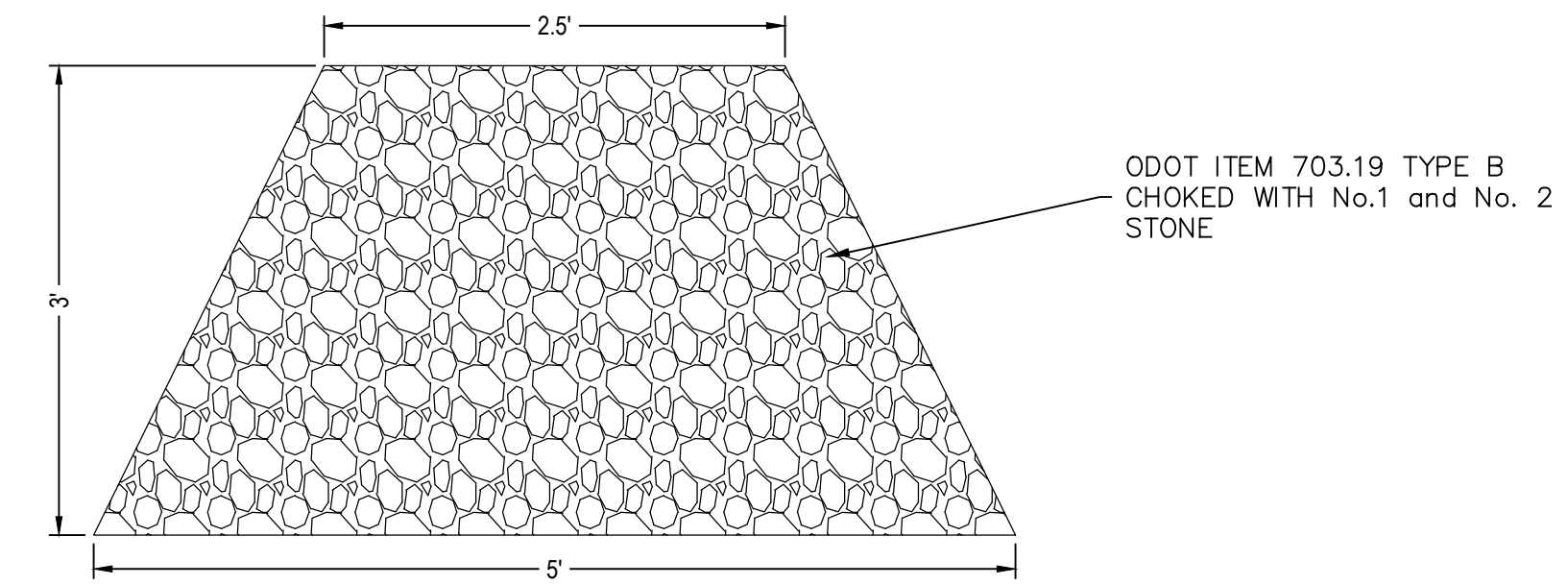
38. ANY PARTY (TYPICALLY THE GENERAL CONTRACTOR) WHO HAS DAY-TO-DAY OPERATIONAL CONTROL OF ACTIVITIES AT THIS PROJECT, WHICH ARE NECESSARY TO ENSURE COMPLIANCE WITH THE SWP3 FOR THE SITE OR OTHER CONDITIONS AS SET FORTH IN THE PERMIT, MUST FILE A CO-PERMITTEE NOI WITH THE OHIO EPA. THIS IS THE SOLE RESPONSIBILITY OF THE CO-PERMITTEE AND SHALL BE DONE 21 DAYS BEFORE GROUND IS BROKEN.





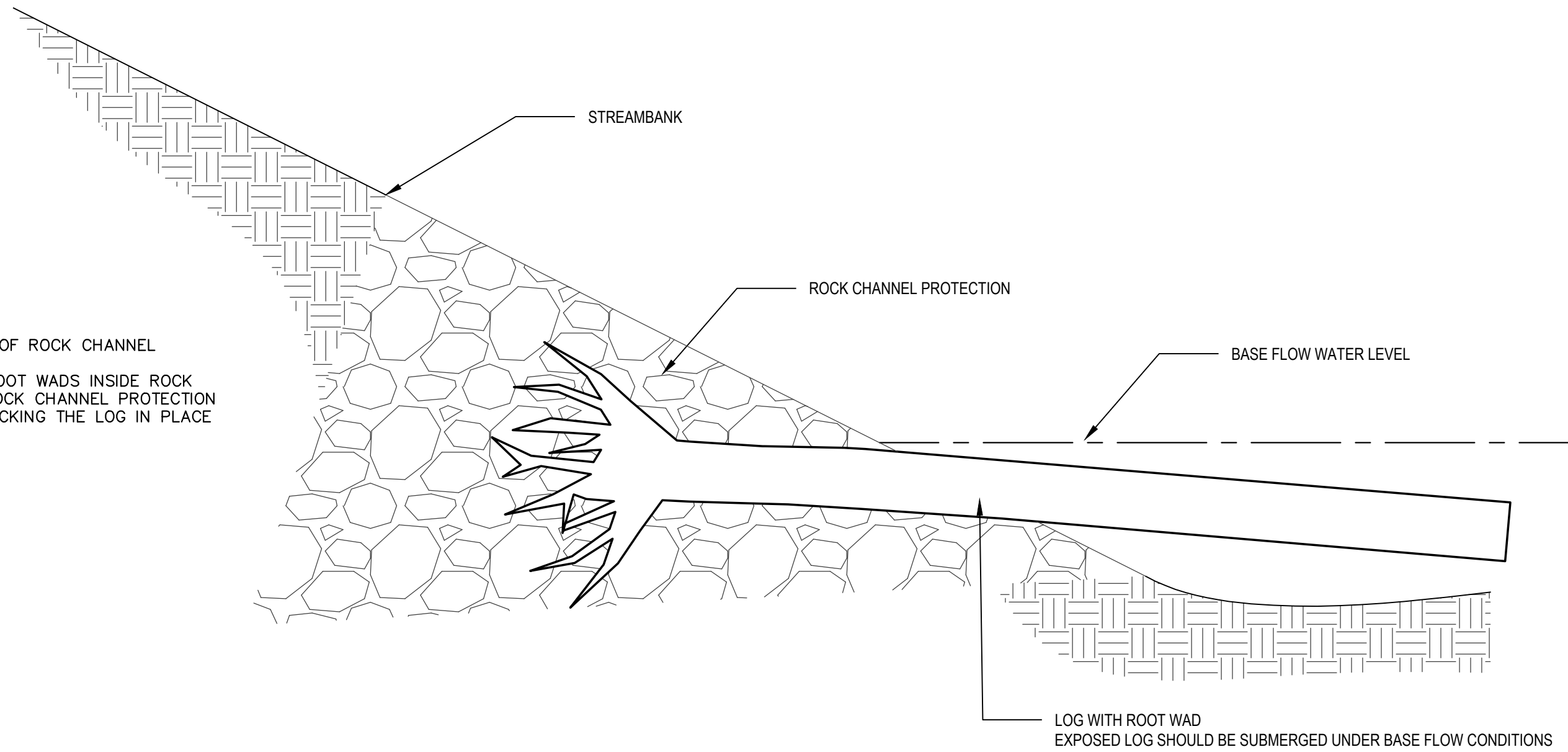
BENDWAY WEIR DETAIL
NO SCALE

- NOTES**
1. EACH WEIR IS APPROXIMATELY 5' WIDE, 3' TALL, 18-20' LONG. 5 TOTAL PROPOSED WEIRS. TOE OF WEIR TO EXTEND TO CHANNEL THALWEG.
 2. ODOT ITEM 703.19 TYPE B MATERIAL TO BE USED AND CHOKED WITH No. 1 & No. 2 STONE.

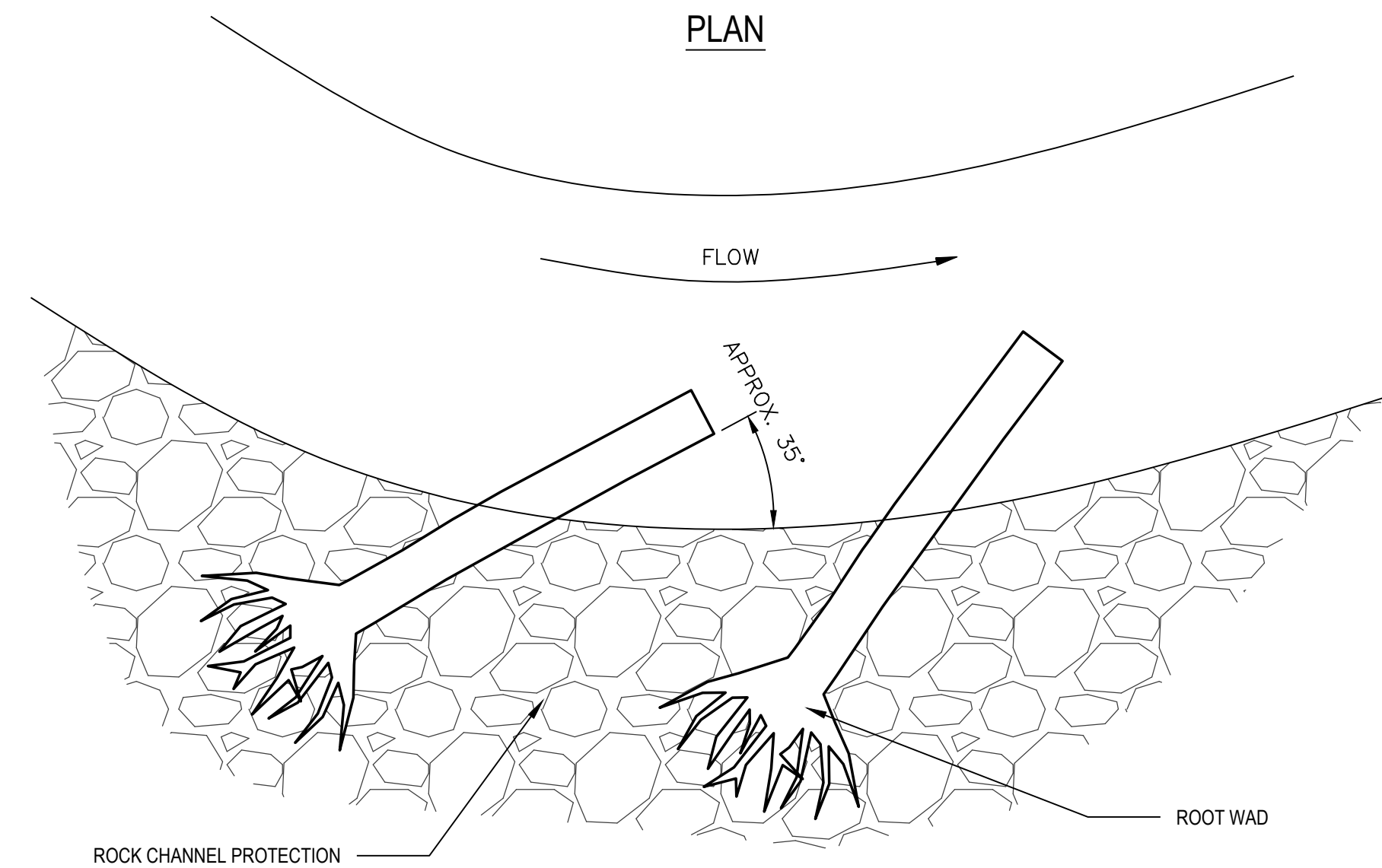


ODOT ITEM 703.19 TYPE B
CHOKED WITH No.1 and No. 2
STONE

- INSTALLATION SEQUENCE:**
1. PLACE BASE LAYER OF ROCK CHANNEL PROTECTION
 2. PLACE LOGS WITH ROOT WADS INSIDE ROCK CHANNEL PROTECTION
 3. PLACE REMAINING ROCK CHANNEL PROTECTION OVER ROOT WAD, LOCKING THE LOG IN PLACE

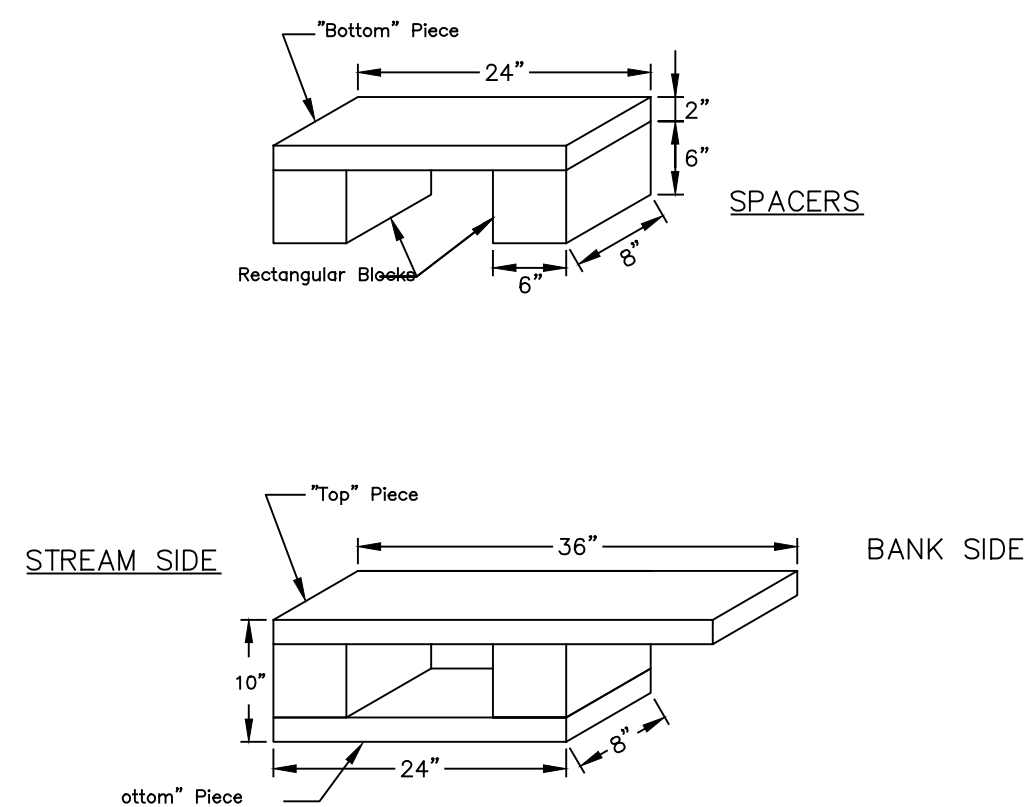


LOCKED LOG DETAIL
NO SCALE



PLAN

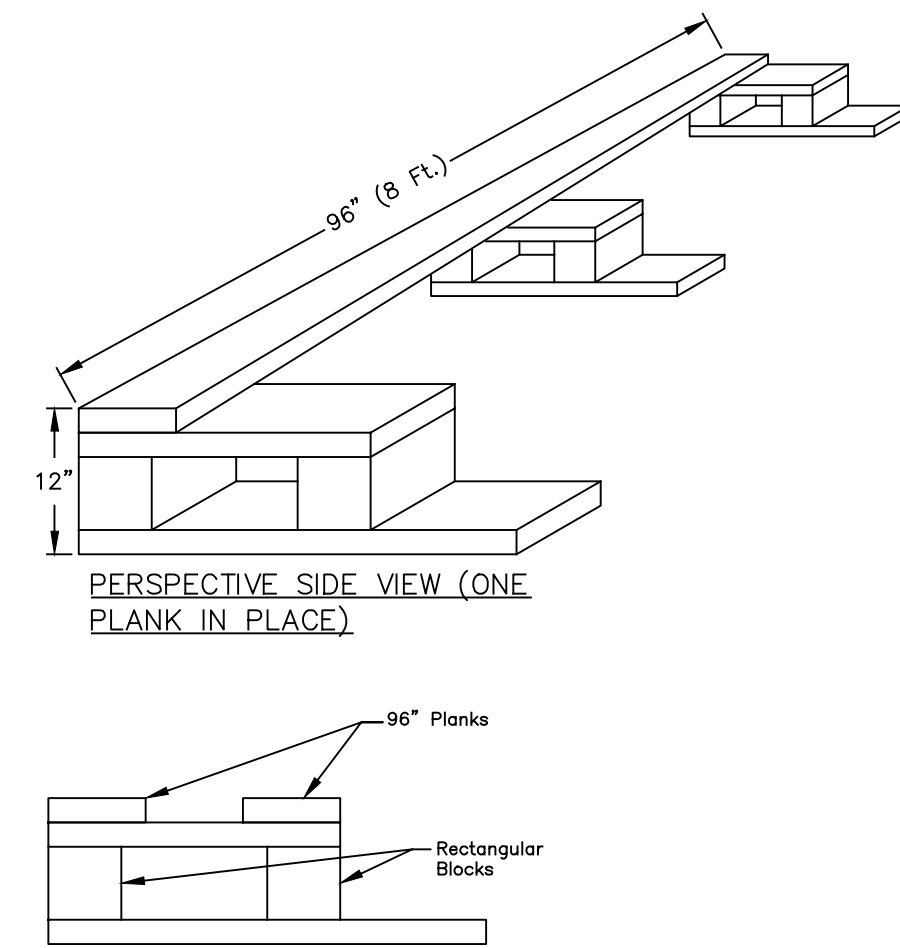
(A) STEP 1



STEP 1: BUILD SPACERS

BUILD 3 EQUAL SPACES AS SHOWN USING OAK OR OTHER WOOD THAT IS STRONG AND ROT RESISTANT. USE 20d NAILS MIN.

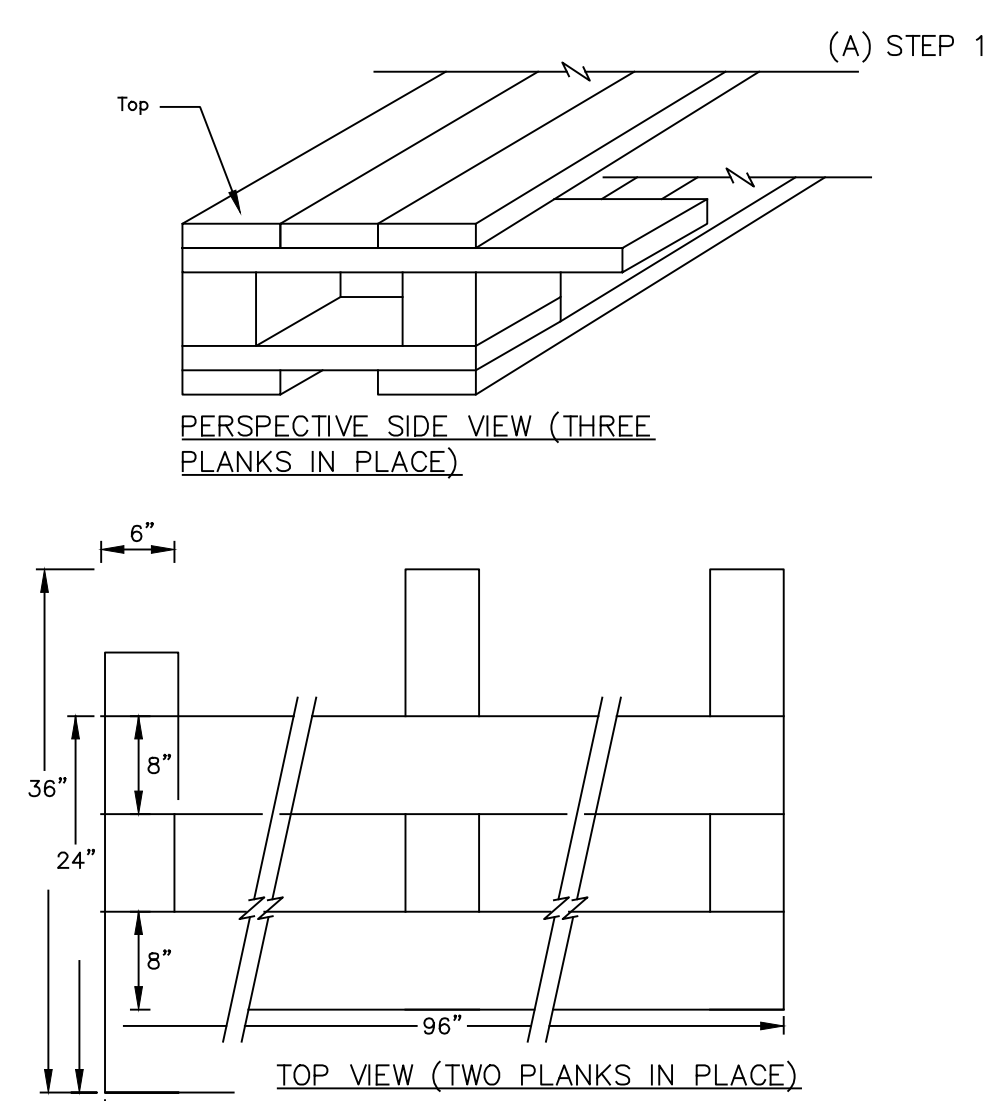
(B) STEP 2



STEP 2: FORM THE LUNKER BOTTOM.

BRIDGE THE SPACERS WITH TWO 8 ft. PLANKS. THE SPACERS SHOULD BE EVENLY SPACED. SECURE EACH PLANK WITH 20d NAILS

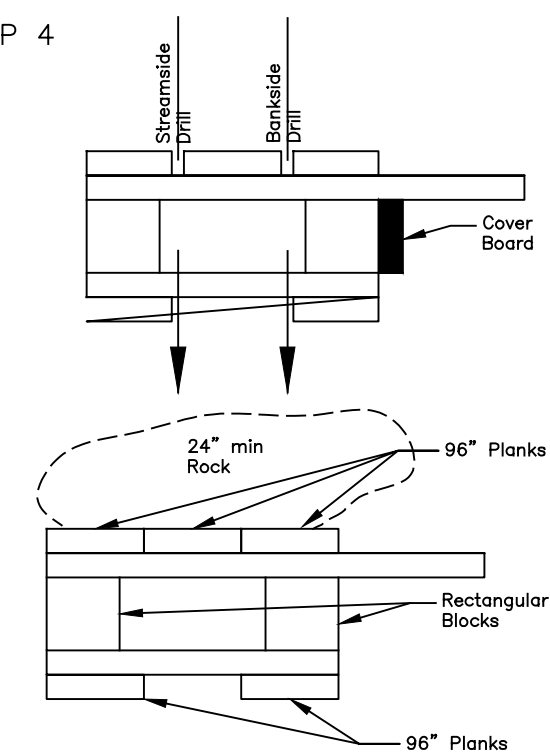
(C) STEP 3



STEP 3: FORM THE LUNKER TOP

BRIDGE THE SPACERS WITH THREE 8 ft. PLANKS. SECURE EACH PLANK WITH 20d NAILS

(D) STEP 4

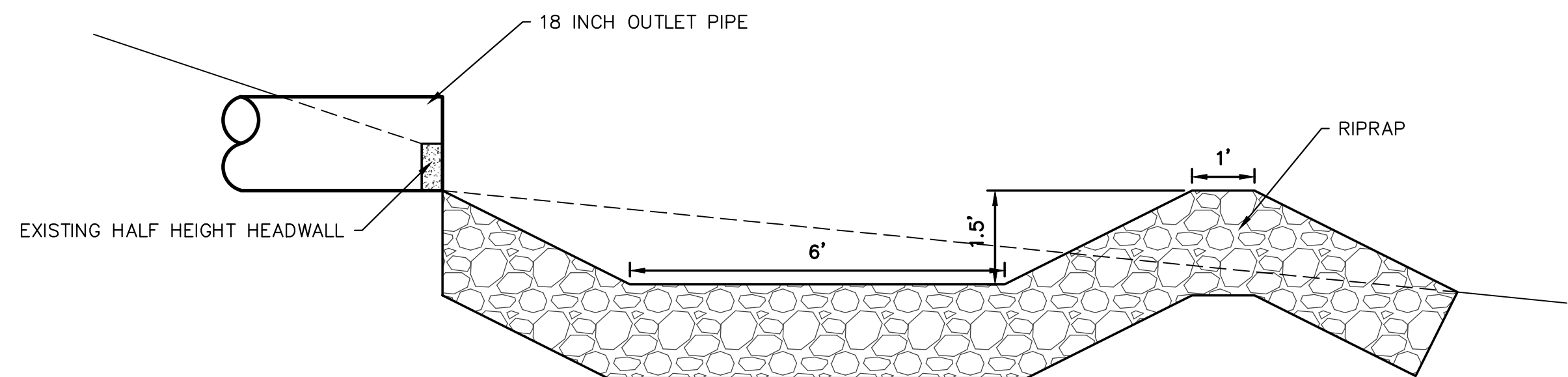


STEP 4: PREPARE LUNKERS FOR PLACEMENT

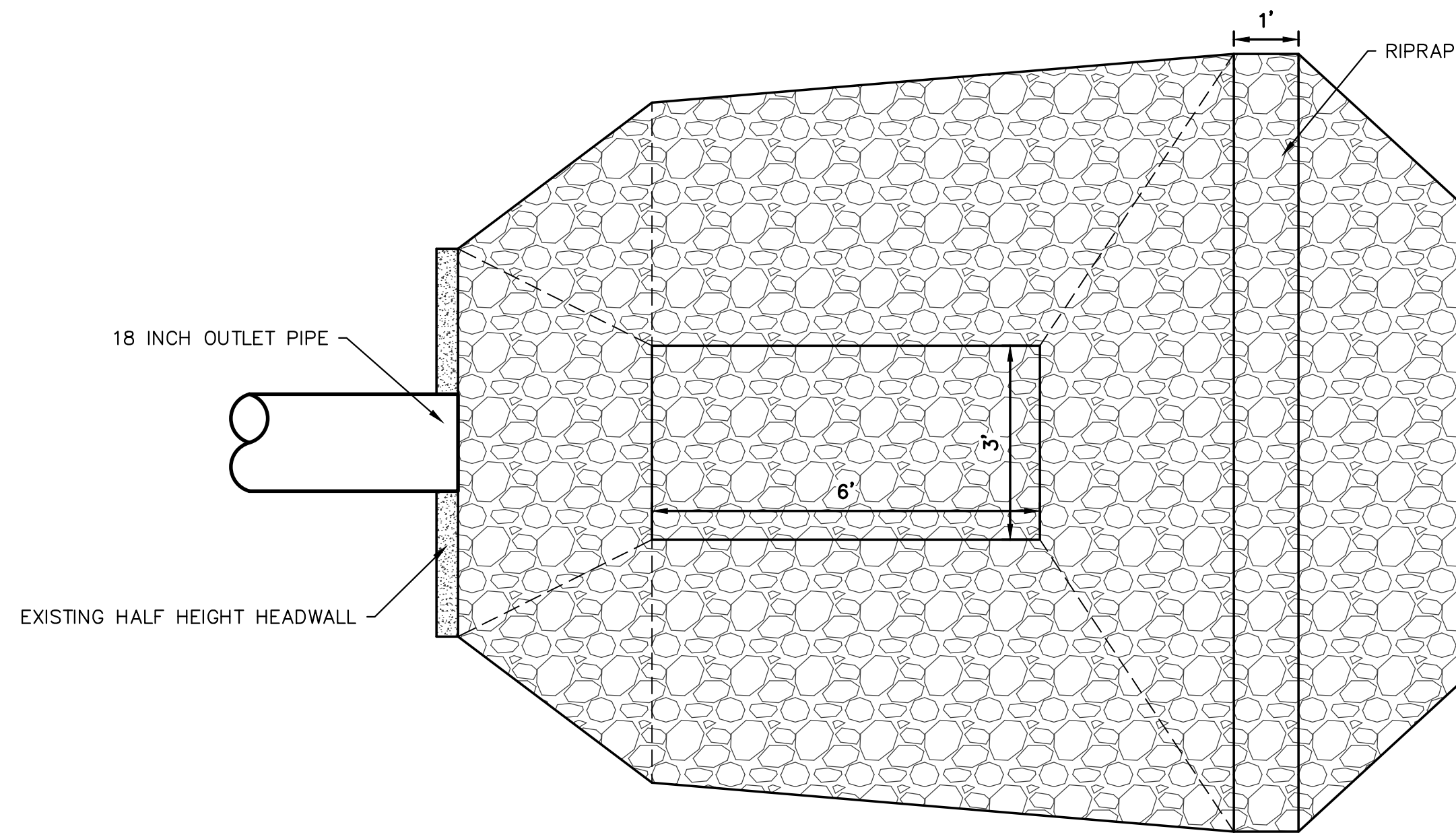
INSTALL COVER BOARD ON BANK SIDE OF LUNKER. THE PLACEMENT OF LUNKER IS DEPENDANT ON THE BASE MATERIAL.

PLACE ROCK CHANNEL PROTECTION OVER THE LUNKERS.

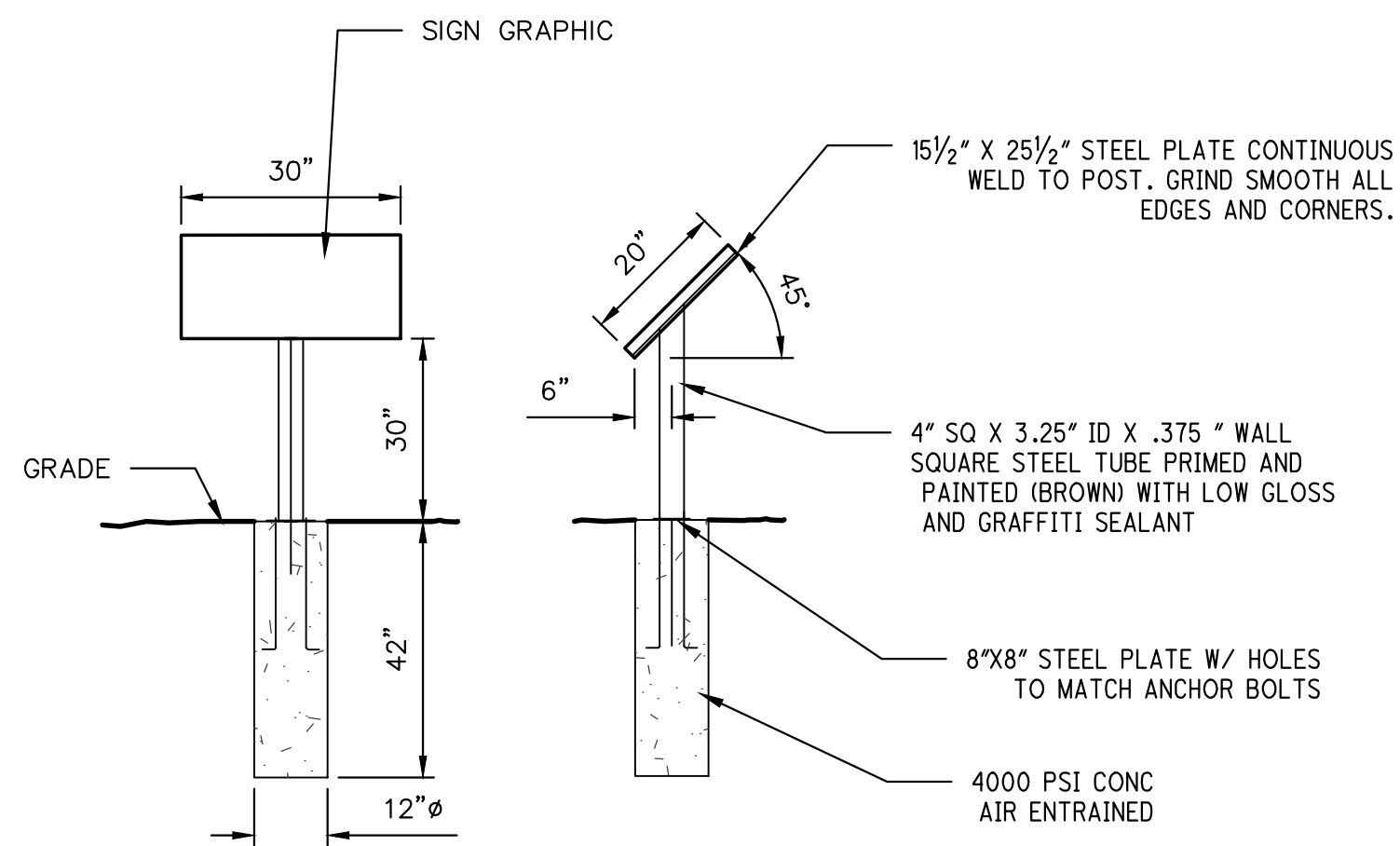
LUNKER CONSTRUCTION DETAIL
NO SCALE



PLUNGE POOL SECTION VIEW
NO SCALE



PLUNGE POOL PLAN VIEW
NO SCALE



SIGN DETAIL

NOT TO SCALE

NOTE: CONTRACTOR TO SUBMIT SHOP
DRAWINGS PRIOR TO ORDERING AND
MANUFACTURING

Calculated:
Checked:

DETAILS

TOTAL PROJECT PLANT LIST

QTY	Sym.	Scientific Name	Common Name	Size	Root	Minimum Spacing
		<u>Riparian Planting - Bare Root Trees</u>				
490		Carya ovata	shagbark hickory	2' height	bare root	8'
		Platanus occidentalis	American sycamore	2' height	bare root	
		Quercus bicolor	swamp white oak	2' height	bare root	
		Quercus macrocarpa	burr oak	2' height	bare root	
		Quercus rubra	Northern red oak	2' height	bare root	
		<u>Bare Root Shrubs</u>				
14	CO	Cephalanthus occidentalis	buttonbush	1' height	bare root	as shown
16	CA	Cornus amomum	silky dogwood	1' height	bare root	
14	LB	Lindera benzoin	spicebush	1' height	bare root	
19	PO	Physocarpus opulifolius	common ninebark	1' height	bare root	
		<u>Live Stakes</u>				
165		Platanus occidentalis	American sycamore	4' long	live cutting	2'
		Cornus amomum	silky dogwood	4' long	live cutting	
		Physocarpus opulifolius	common ninebark	4' long	live cutting	
		Sambucus nigra ssp. canadensis	American black elderberry	4' long	live cutting	
			<u>Live Whips</u>			
4106		Platanus occidentalis	American sycamore	6' long	live cutting	4" (3 per 1')
		Cornus amomum	silky dogwood	6' long	live cutting	
		Physocarpus opulifolius	common ninebark	6' long	live cutting	
		Sambucus nigra ssp. canadensis	American black elderberry	6' long	live cutting	

ANY SPECIES OR QUANTITY SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF TOLEDO

NOTES:

LIVE STAKES

LIVE STAKES SHALL CONSIST OF THE FOUR SPECIES INDICATED IN THE PLANT LIST. CONTRACTOR SHALL ATTEMPT TO SOURCE NEAR-EQUAL QUANTITIES OF EACH SPECIES, TOTALING THE QUANTITY INDICATED ON THE TOTAL PROJECT PLANT LIST. STAKE SHALL BE FREE FROM DISEASE OR EXCESS DEAD TWIGS, 4 FEET IN LENGTH WITH A BASAL END 1.0 TO 1.5 INCH IN DIAMETER. PRIOR TO INSTALLATION BASAL END SHALL BE CUT AT A 45 DEGREE ANGLE AND THE TOP END SHALL BE CUT FLAT WITHOUT CRACKS, AS SHOWN IN THE LIVE STAKE PLANTING DETAIL.

LIVE STAKES SHALL BE INSTALLED BY GENTLY TAMPING INTO SOIL, PRE-DRILLING SMALL HOLE, OR DIGGING A TRENCH AND INSERTING SO THAT THE STAKE IS FIRMLY IN PLACE AND IN CONTACT WITH THE SURROUNDING SOIL. A MAXIMUM OF 20% OF THE STAKE AND A MINIMUM OF TWO BUDS SHALL BE EXPOSED.

LIVE STAKES SHALL BE INSTALLED WITH TRIANGULAR SPACING AS SPECIFIED ON THE PLANT LIST, AT OR DIRECTLY ABOVE THE ORDINARY HIGH WATER MARK AS SHOWN ON THE PLANS.

LIVE STAKES SHALL BE INSTALLED WHEN THEY ARE DORMANT, WHICH TYPICALLY OCCURS BETWEEN OCTOBER 31 AND MARCH 31, OR ELSE SHALL BE SOAKED IN THE OTTAWA RIVER FOR A MINIMUM OF TWO WEEKS PRIOR TO INSTALLATION TO ENCOURAGE ROOT GROWTH.

EROSION CONTROL BLANKET

AN EROSION CONTROL BLANKET SHALL BE INSTALLED ALONG THE NEWLY GRADED DOWNSTREAM BANK WHERE SOIL IS EXPOSED ABOVE THE ROCK PROTECTION, SEE SHEET X. EROSION CONTROL BLANKET SHALL BE 100% BIODEGRADABLE STRAW BLANKETS, AMERICAN EXCELSIOR COMPANY PREMIER STRAW® BLANKETS WITH FIBRENET™ NETTING, OR AN APPROVED EQUAL. SHALL BE USED. PLASTIC OR PHOTODEGRADABLE NETTING SHALL NOT BE USED. EROSION CONTROL BLANKETS SHALL BE INSTALLED AS PER THE EROSION CONTROL BLANKET DETAIL. METAL OR WOOD LAWN STAPLES SHALL BE INSTALLED THROUGH THE BLANKET AS SPECIFIED BY THE MANUFACTURER TO KEEP THE BLANKET IN-PLACE.

LIVE WHIPS

LIVE WHIPS (THIN, LIVE, WOODY CUTTINGS) SHALL CONSIST OF THE FOUR SPECIES INDICATED IN THE PLANT LIST. CONTRACTOR SHALL ATTEMPT TO SOURCE NEAR-EQUAL QUANTITIES OF EACH SPECIES, TOTALING THE QUANTITY INDICATED ON THE TOTAL PROJECT PLANT LIST. WHIP SHALL BE FREE FROM DISEASE OR EXCESS DEAD TWIGS, 6 FEET IN LENGTH WITH A BASAL END ¾ INCH TO 1 INCH IN DIAMETER.

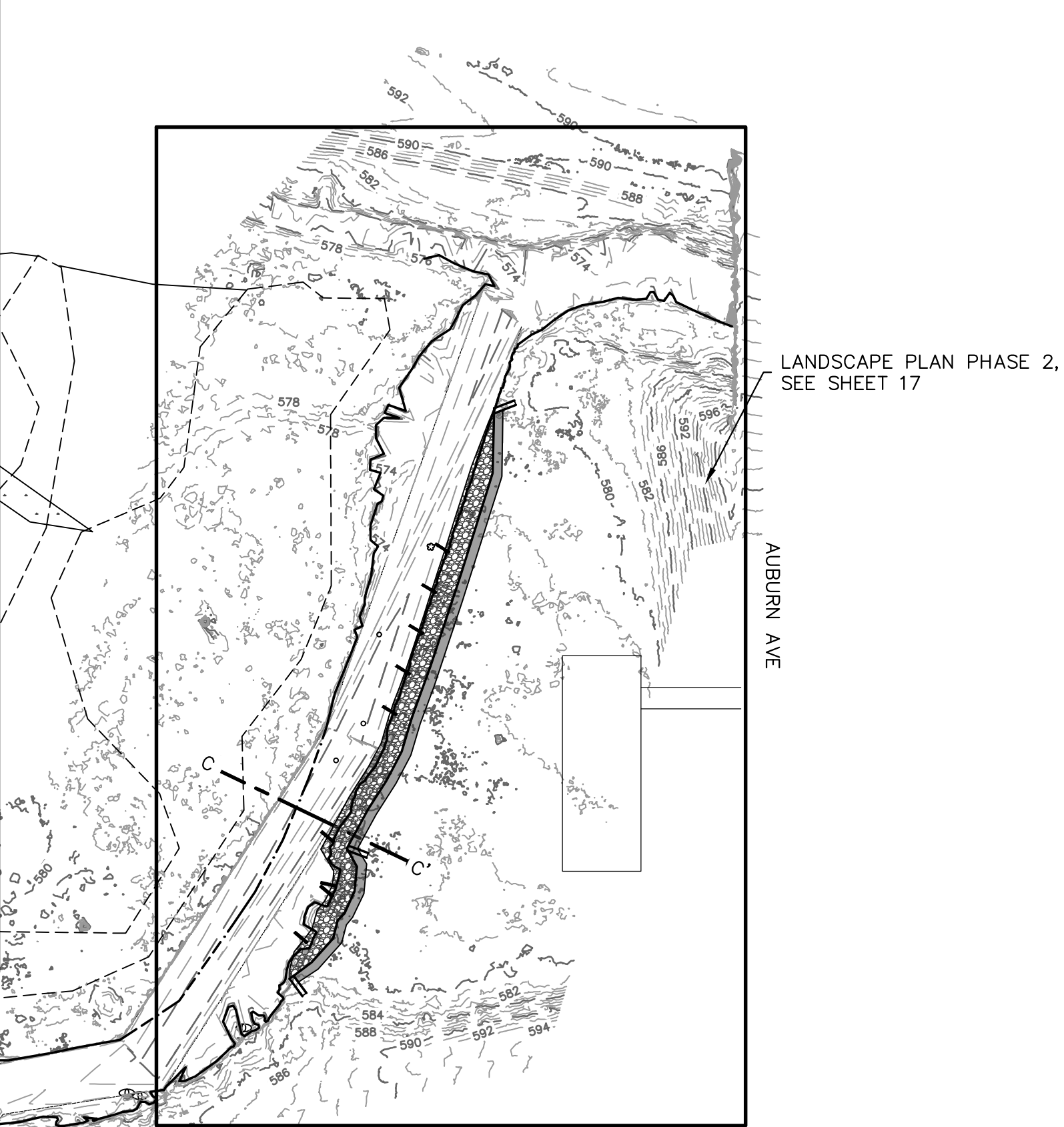
LIVE WHIPS SHALL BE INSTALLED BY DIGGING A TRENCH AND INSERTING SO THAT THE WHIP IS FIRMLY IN PLACE AND IN CONTACT WITH THE SURROUNDING SOIL. A MAXIMUM OF 30% OF THE WHIP SHALL BE EXPOSED. WHEN BEING INSTALLED AS PART OF THE LIVE SILTATION LAYER, WHIPS SHALL BE INSTALLED AS SHOWN ON THE LIVE SILTATION DETAIL. WHEN BEING INSTALLED AS PART OF A LIVING DIKE, WHIPS SHALL BE INSTALLED AS SHOWN ON THE LIVING DIKE DETAIL. WHEN BEING INSTALLED AS PART OF THE VEGETATED KEY, WHIPS SHALL BE INSTALLED AS SHOWN ON THE VEGETATED KEY DETAIL.

LIVE WHIPS SHALL BE INSTALLED IN A LINE, 3 WHIPS PER LINEAR FOOT. LIVE WHIPS SHALL BE INSTALLED WHEN THEY ARE DORMANT, WHICH TYPICALLY OCCURS BETWEEN OCTOBER 31 AND MARCH 31, OR ELSE SHALL BE SOAKED IN THE OTTAWA RIVER FOR A MINIMUM OF TWO WEEKS PRIOR TO INSTALLATION TO ENCOURAGE ROOT GROWTH

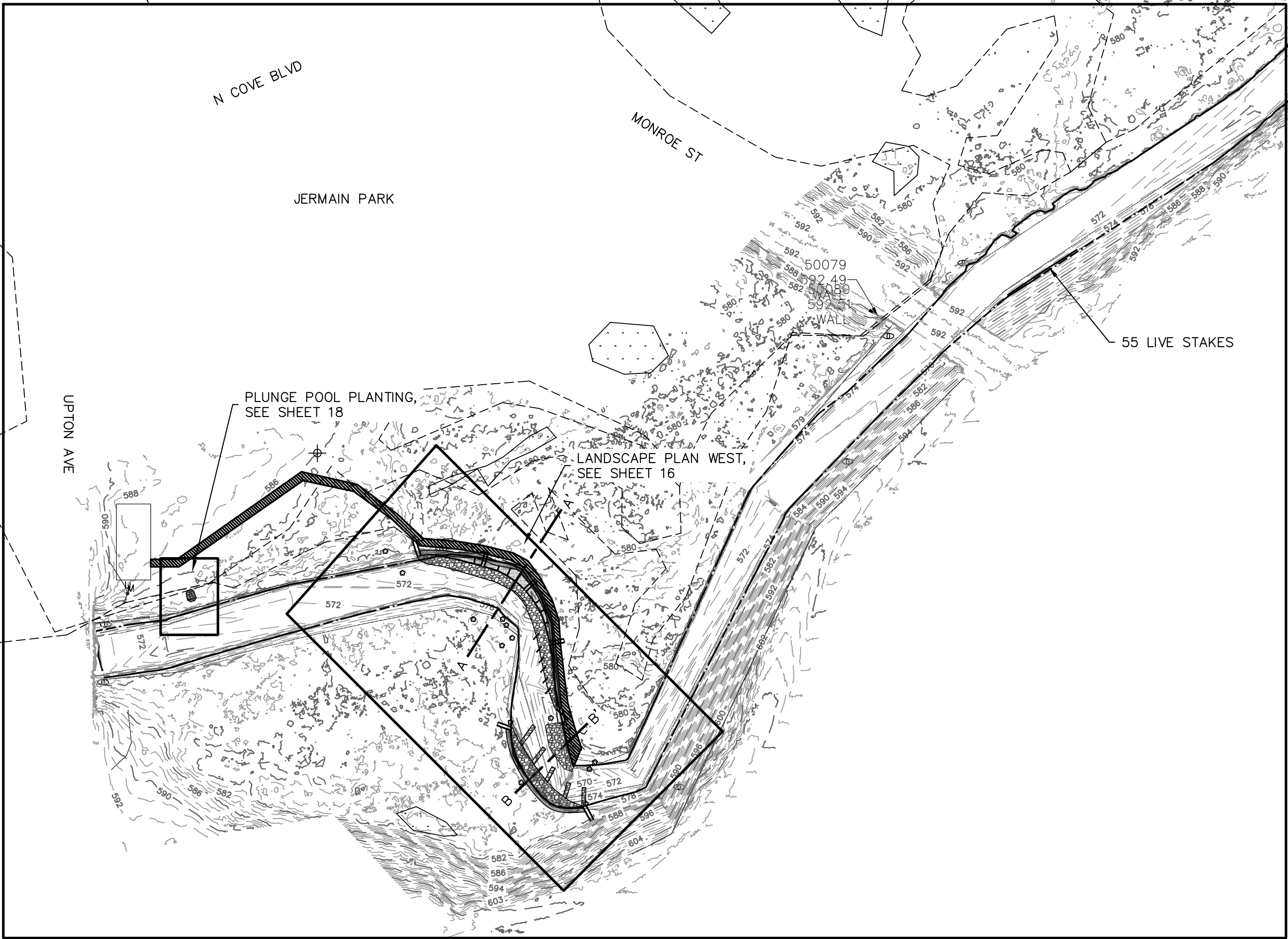
HERBIVORY PROTECTION

INSTALL TREE SHELTERS AS PER MANUFACTURER'S SPECIFICATIONS AROUND ALL BARE ROOT TREES AND THE BARE ROOT SHRUBS IN THE PLUNGE POOL AREA AT TIME OF PLANTING. TREE SHELTERS SHALL NOT BE USED ON THE NEWLY CONSTRUCTED BEND BENCH. INSPECT SHELTERS AFTER ONE GROWING SEASON AND READJUST AND REPLACE IF SHELTERS ARE DAMAGED. SEE BARE ROOT PLANTING DETAIL. TREE SHELTERS FOR BARE ROOT MATERIAL SHALL BE EQUAL OR COMPARABLE TO 3' OR 4' LONG TUBEX TREE SHELTERS.

ALTERNATIVELY, BARE ROOT TREES IN THE RIPARIAN PLANTING AREA MAY BE PROTECTED USING TEMPORARY DEER FENCE, RATHER THAN THE INDIVIDUAL TREE TUBES. TEMPORARY DEER FENCE SHALL BE A MINIMUM OF 8 FEET TALL AND CONSIST OF POLYPROPYLENE MESH FENCE WITH APPROPRIATELY SPACED POSTS. FENCE SHALL BE INSTALLED A MINIMUM OF 8 FEET FROM PLANTINGS. CONTRACTOR SHALL REMOVE FENCE FOLLOWING THE WARRANTY PERIOD AND CLOSE-OUT.



LANDSCAPE PLAN PHASE 1



FLOODPLAIN SEED MIX

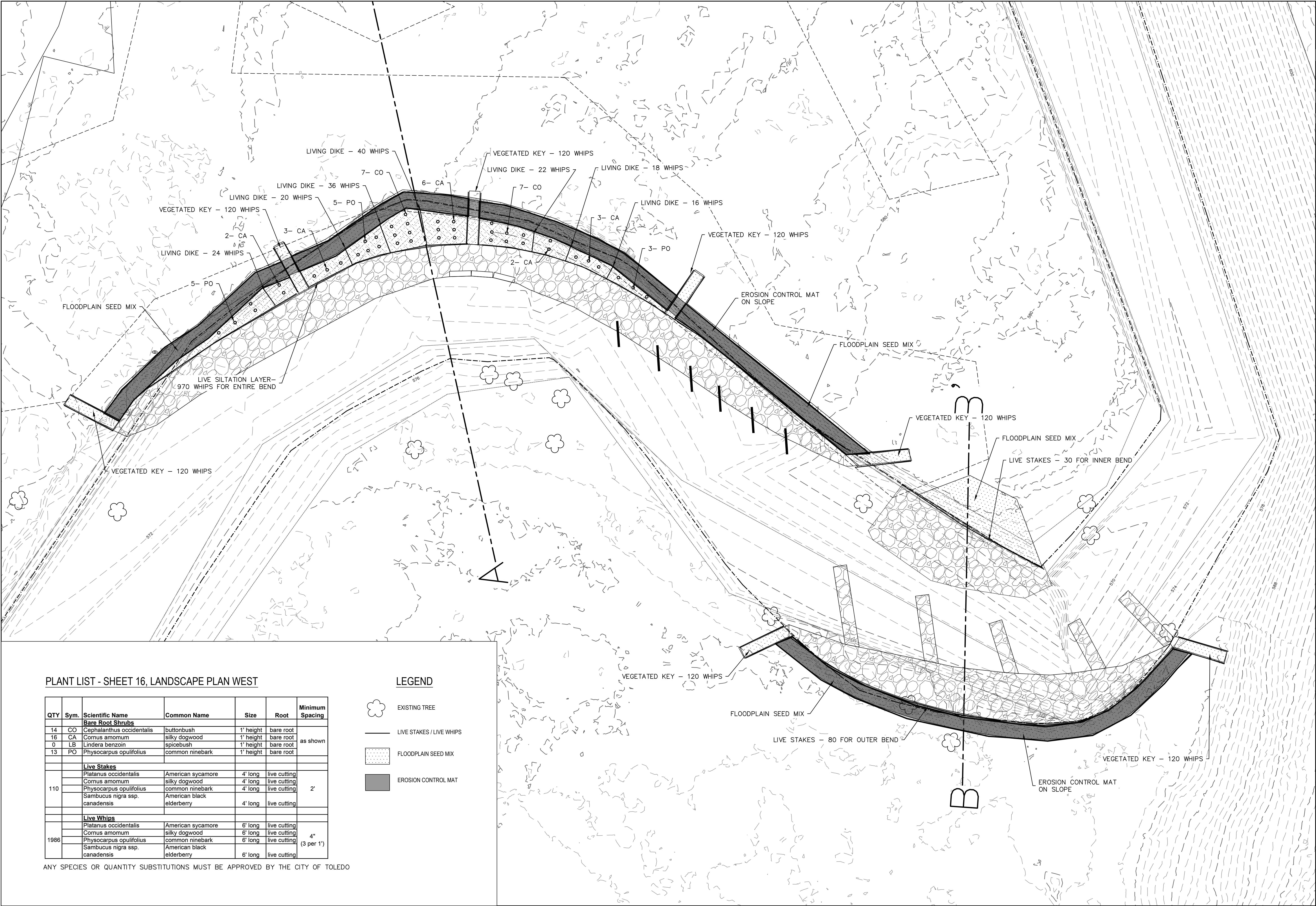
Floodplain Seed Mix		
Scientific Name	Common Name	Oz/Acre
Sedges/Grasses		
<i>Andropogon gerardii</i>	big bluestem	14.0
<i>Carex frankii</i>	Frank's sedge	1.0
<i>Carex grayi</i>	Gray's sedge	1.0
<i>Carex lupulina</i>	hop sedge	2.0
<i>Elymus virginicus</i>	Virginia wild rye	20.0
<i>Glyceria striata</i>	fowl mannagrass	3.0
<i>Leersia oryzoides</i>	rice culgrass	5.0
<i>Panicum virgatum</i>	switchgrass	2.0
Forbs		
<i>Aquilegia canadensis</i>	wild columbine	1.0
<i>Asclepias incarnata</i>	swamp milkweed	2.0
<i>Bidens frondosa</i>	devil's beggarstick	1.0
<i>Boehmeria cylindrica</i>	false nettle	1.0
<i>Eutrochium purpureum</i>	purple joe-pyeweed	1.0
<i>Eupatorium perfoliatum</i>	common boneset	0.5
<i>Lobelia siphilitica</i>	great blue lobelia	1.0
<i>Thalictrum dayscarpum</i>	purple meadow rue	1.0
<i>Verbena hastata</i>	blue vervain	2.0
<i>Verbesena alternifolia</i>	wingstem	1.0
<i>Zizia aurea</i>	golden alexander	2.0
Temporary Cover		
<i>Avena sativa</i>	common oat	500.0
SEED AT 35.0 LB/ACRE		

ANY SPECIES OR QUANTITY SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF TOLEDO

PLANT LIST - SHEET 15

QTY	Sym.	Scientific Name	Common Name	Size	Root	Minimum Spacing
55		Live Stakes				
		<i>Platanus occidentalis</i>	American sycamore	4' long	live cutting	2'
		<i>Cornus amomum</i>	silky dogwood	4' long	live cutting	
		<i>Physocarpus opulifolius</i>	common ninebark	4' long	live cutting	
		<i>Sambucus nigra</i> ssp. <i>canadensis</i>	American black elderberry	4' long	live cutting	

ANY SPECIES OR QUANTITY SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF TOLEDO



08

16

32

Horizontal Scale in Feet

Calculated:

Checked:

LANDSCAPE PLAN WEST

OTTAWA RIVER
JERMAIN PARK
RESTORATION

16

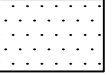
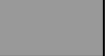
19

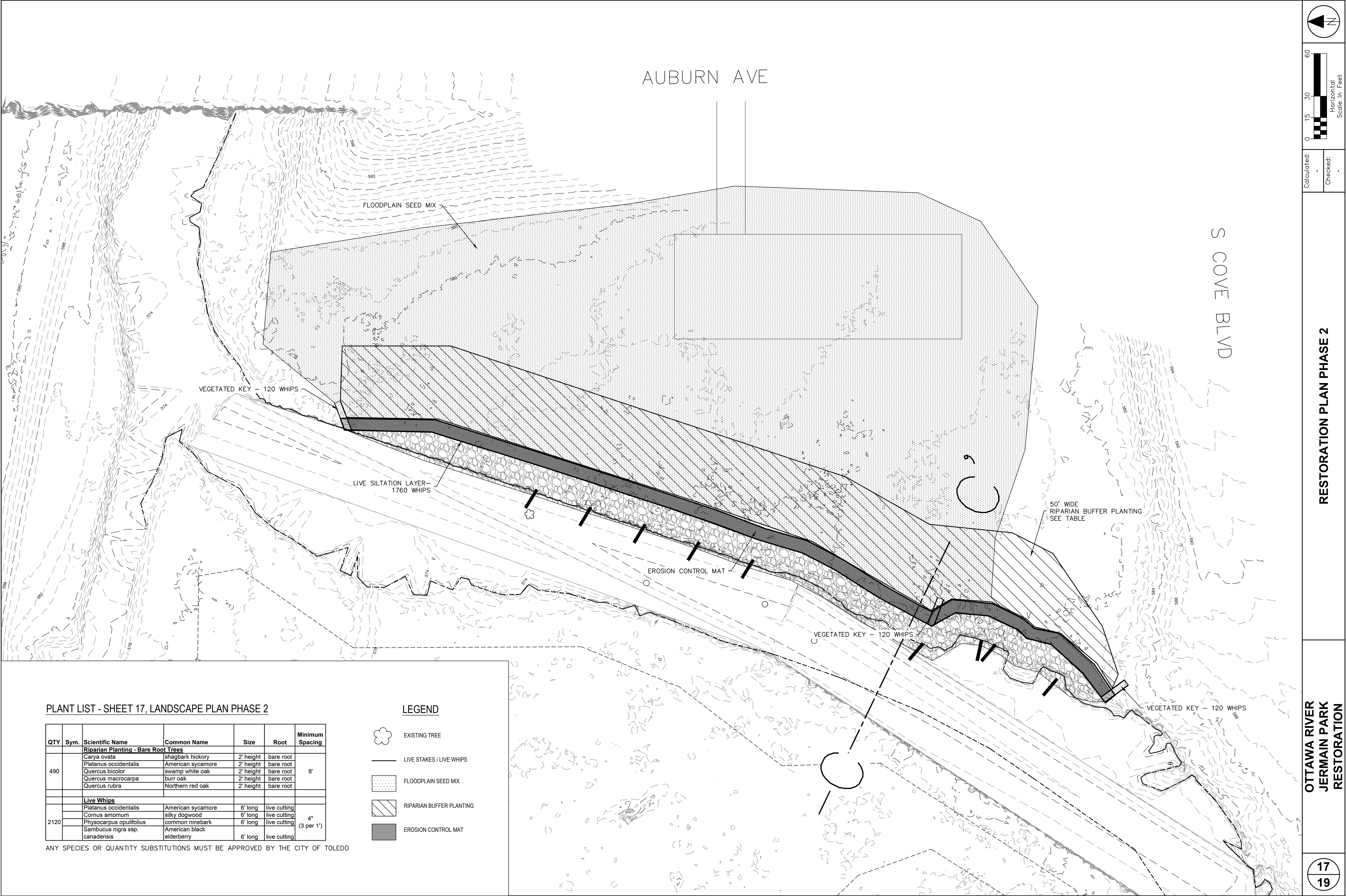
PLANT LIST - SHEET 16, LANDSCAPE PLAN WEST

QTY	Sym.	Scientific Name	Common Name	Size	Root	Minimum Spacing
		Bare Root Shrubs				
14	CO	Cephalanthus occidentalis	buttonbush	1' height	bare root	as shown
16	CA	Cornus amomum	silky dogwood	1' height	bare root	
0	LB	Lindera benzoin	spicebush	1' height	bare root	
13	PO	Physocarpus opulifolius	common ninebark	1' height	bare root	
		Live Stakes				
		Platanus occidentalis	American sycamore	4' long	live cutting	2'
		Cornus amomum	silky dogwood	4' long	live cutting	
		Physocarpus opulifolius	common ninebark	4' long	live cutting	
		Sambucus nigra ssp. canadensis	American black elderberry	4' long	live cutting	
		Live Whips				
		Platanus occidentalis	American sycamore	6' long	live cutting	4" (3 per 1')
		Cornus amomum	silky dogwood	6' long	live cutting	
		Physocarpus opulifolius	common ninebark	6' long	live cutting	
		Sambucus nigra ssp. canadensis	American black elderberry	6' long	live cutting	

ANY SPECIES OR QUANTITY SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF TOLEDO

LEGEND

-  EXISTING TREE
-  LIVE STAKES / LIVE WHIPS
-  FLOODPLAIN SEED MIX
-  EROSION CONTROL MAT



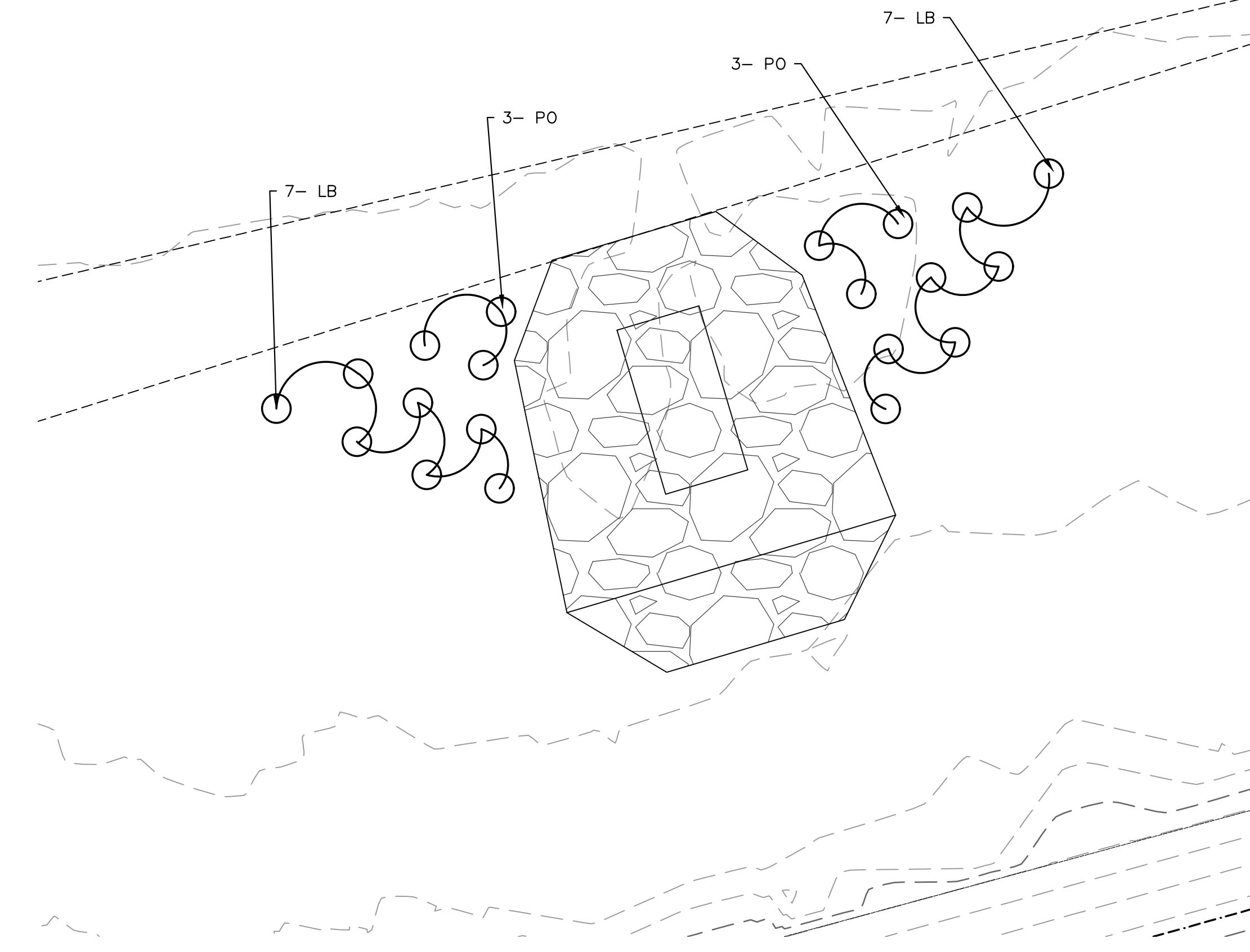
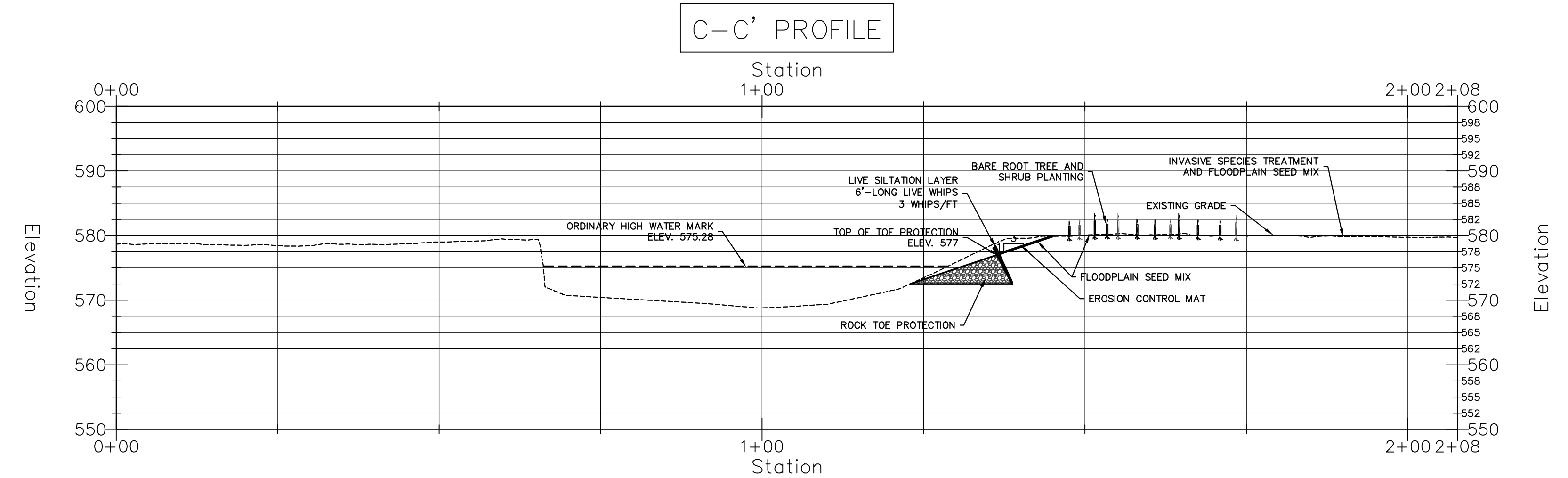
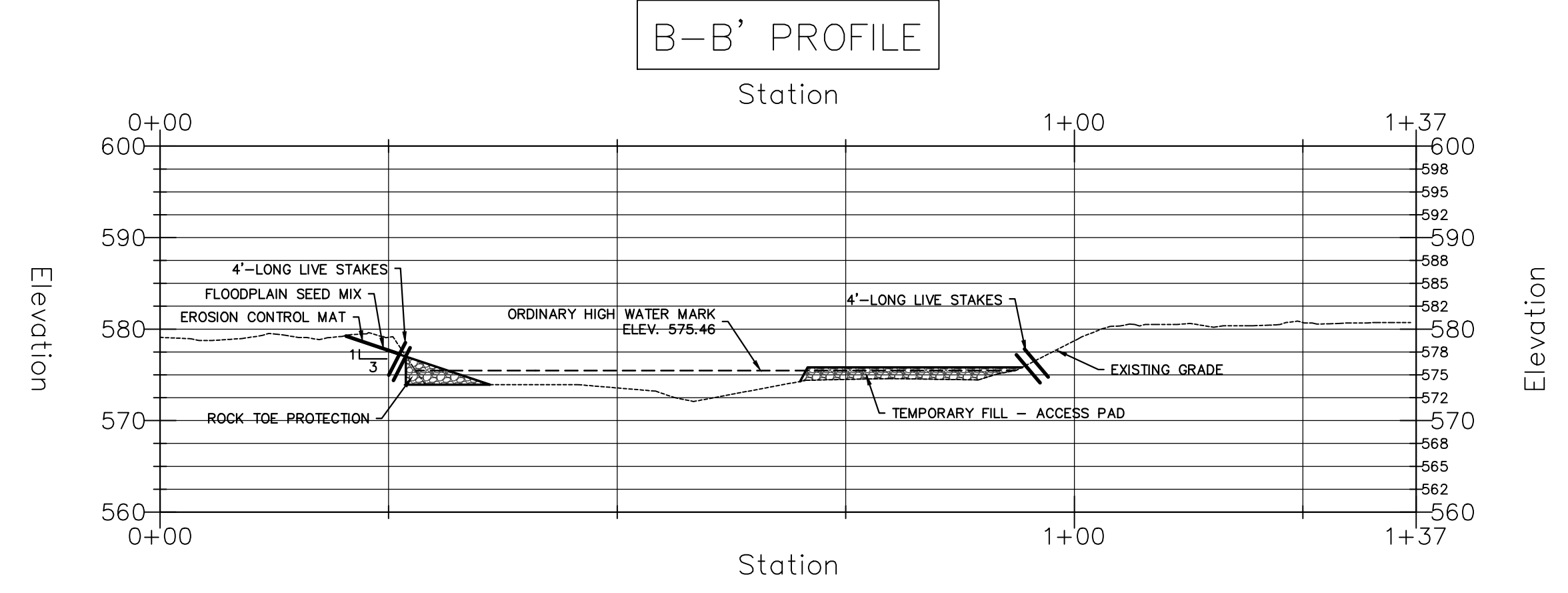
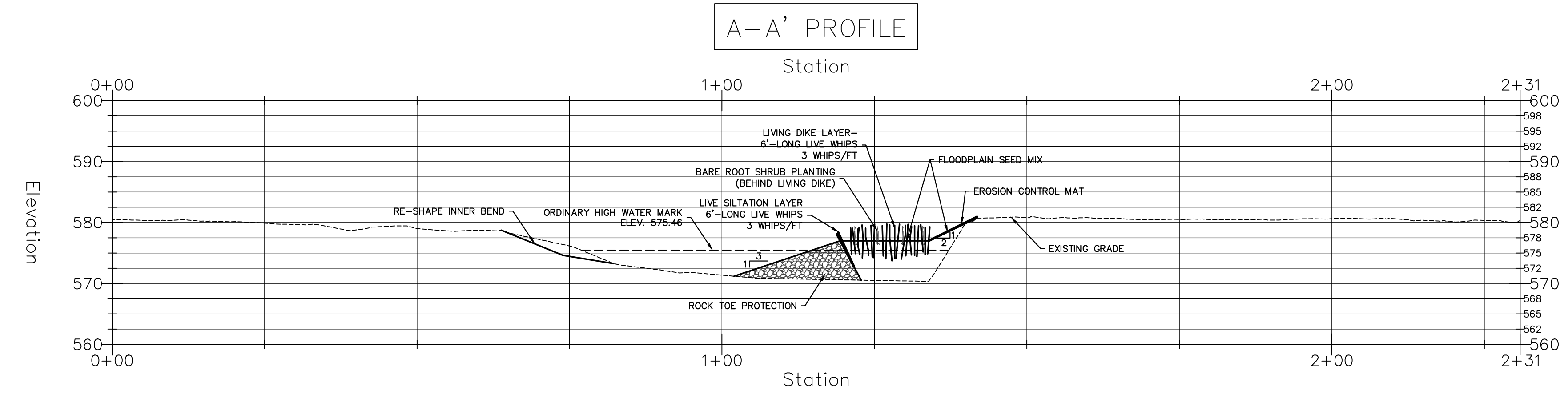
PLANT LIST - SHEET 17, LANDSCAPE PLAN PHASE 2

QTY	Sym.	Scientific Name	Common Name	Size	Root	Minimum Spacing
490		Riparian Planting - Bare Root Trees				8'
		Carya ovata	shagbark hickory	2' height	bare root	
		Platanus occidentalis	American sycamore	2' height	bare root	
		Quercus bicolor	swamp white oak	2' height	bare root	
		Quercus macrocarpa	burr oak	2' height	bare root	
		Quercus rubra	Northern red oak	2' height	bare root	
2120		Live Whips				4" (3 per 1')
		Platanus occidentalis	American sycamore	6' long	live cutting	
		Cornus amomum	silky dogwood	6' long	live cutting	
		Physocarpus opulifolius	common ninebark	6' long	live cutting	
		Sambucus nigra ssp. canadensis	American black elderberry	6' long	live cutting	

ANY SPECIES OR QUANTITY SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF TOLEDO

LEGEND

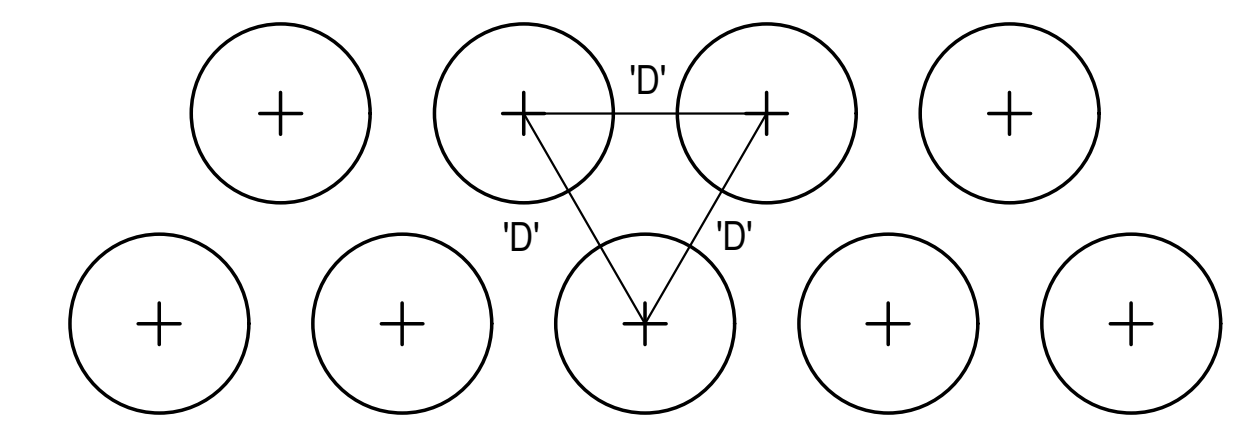
- EXISTING TREE
- LIVE STAKES / LIVE WHIPS
- FLOODPLAIN SEED MIX
- RIPARIAN BUFFER PLANTING
- EROSION CONTROL MAT



PLUNGE POOL PLANT LIST

QTY	Sym.	Scientific Name	Common Name	Size	Root	Minimum Spacing
0	CO	Cephalanthus occidentalis	buttonbush	1' height	bare root	as shown
0	CA	Cornus amomum	silky dogwood	1' height	bare root	
14	LB	Lindera benzoin	spicebush	1' height	bare root	
6	PO	Physocarpus opulifolius	common ninebark	1' height	bare root	

ANY SPECIES OR QUANTITY SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF TOLEDO

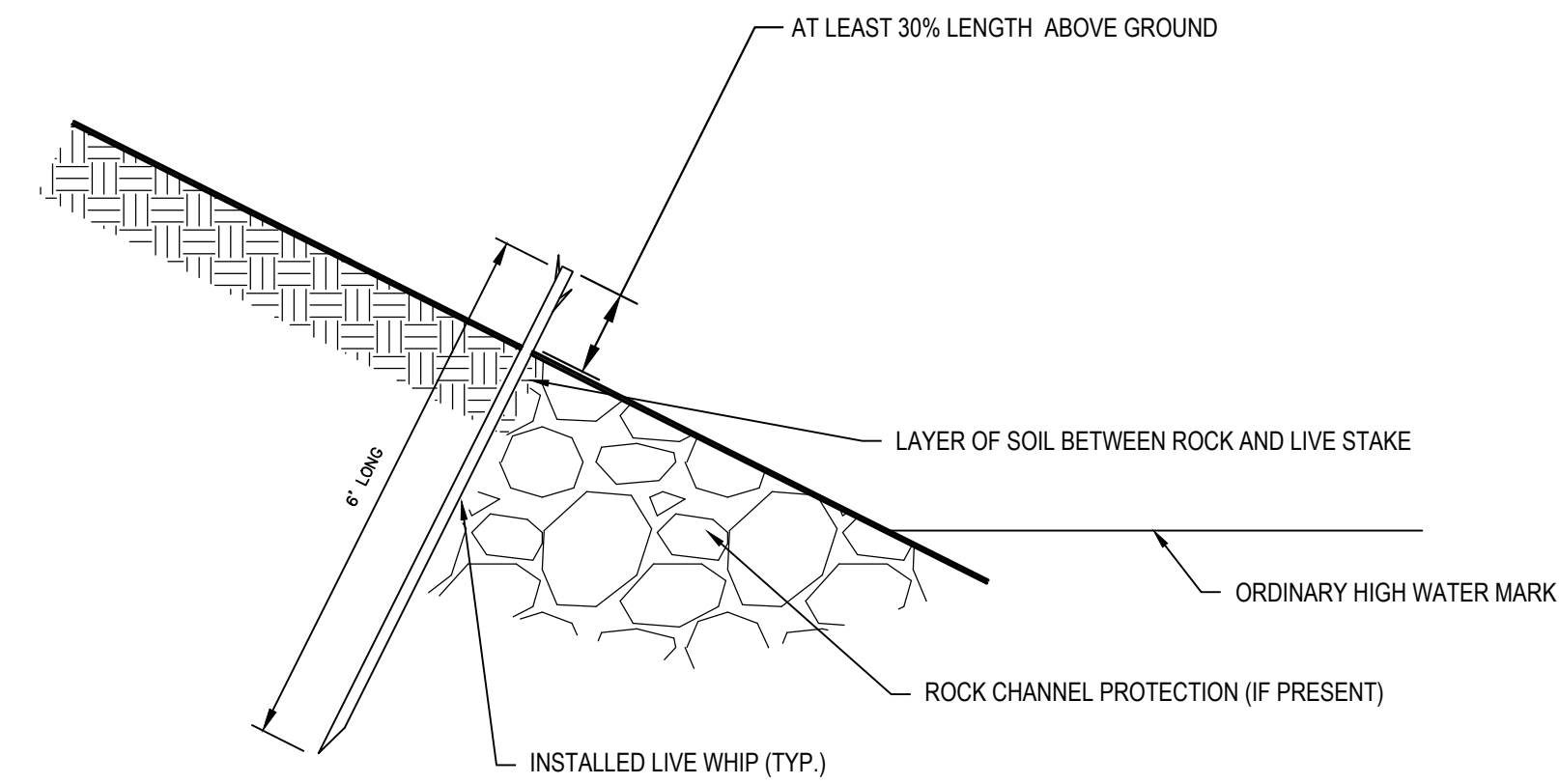


D = DIMENSION OF SPACING AS INDICATED IN PLANT LIST

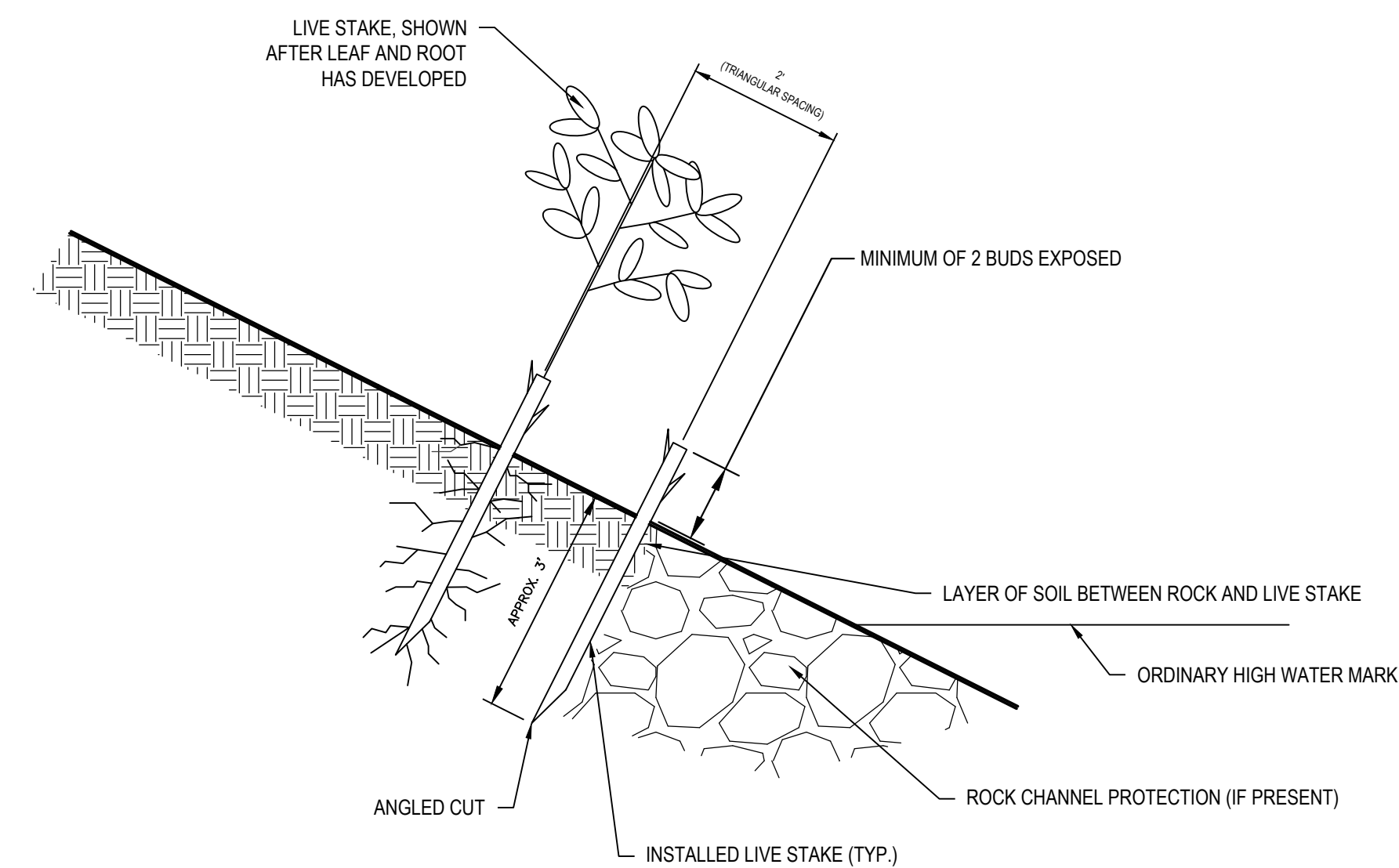
TYPICAL PLANT SPACING

NO SCALE
NOTE: LIVE WHIPS SHALL BE
INSTALLED IN A LINE AND NOT
WITH THE TRIANGULAR SPACING
SHOWN HERE

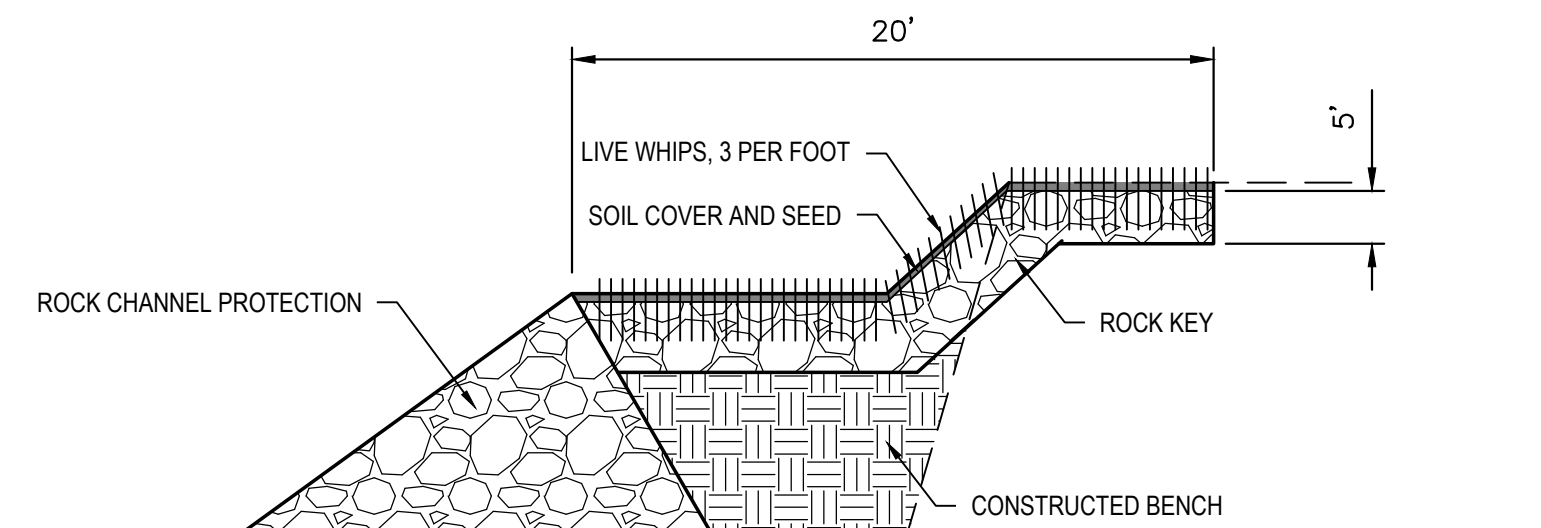
1. PLACE ROCK
2. ADD THIN LAYER OF SOIL BEHIND ROCK
3. PLACE LIVE WHIPS - 3 PER LINEAR FOOT
4. BUILD BANK BEHIND WHIPS



NO SCALE

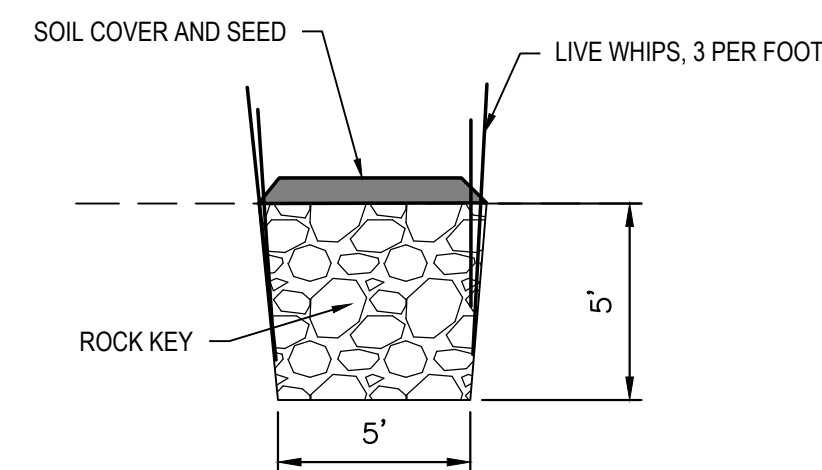


NO SCALE

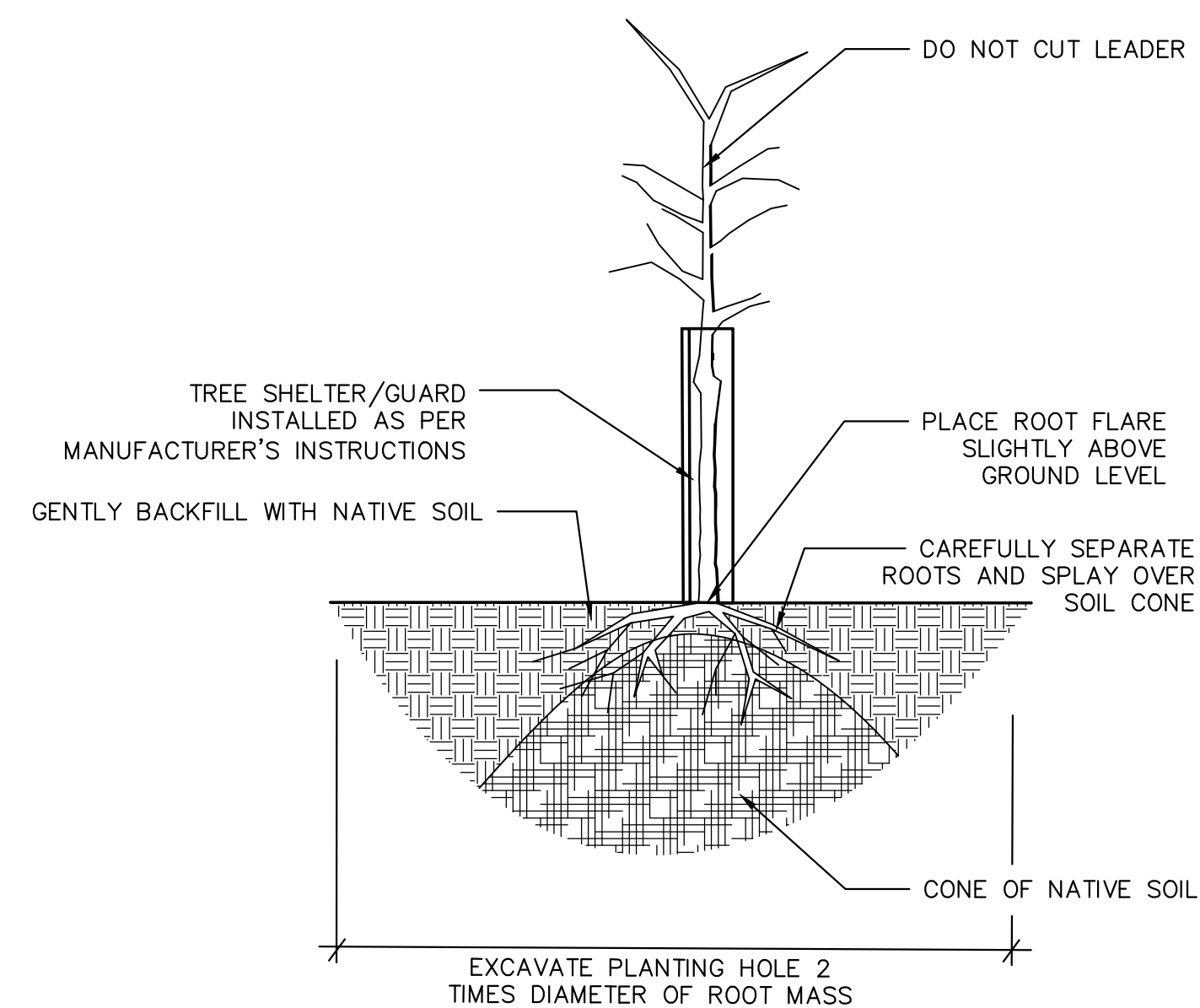


INSTALLATION SEQUENCE:

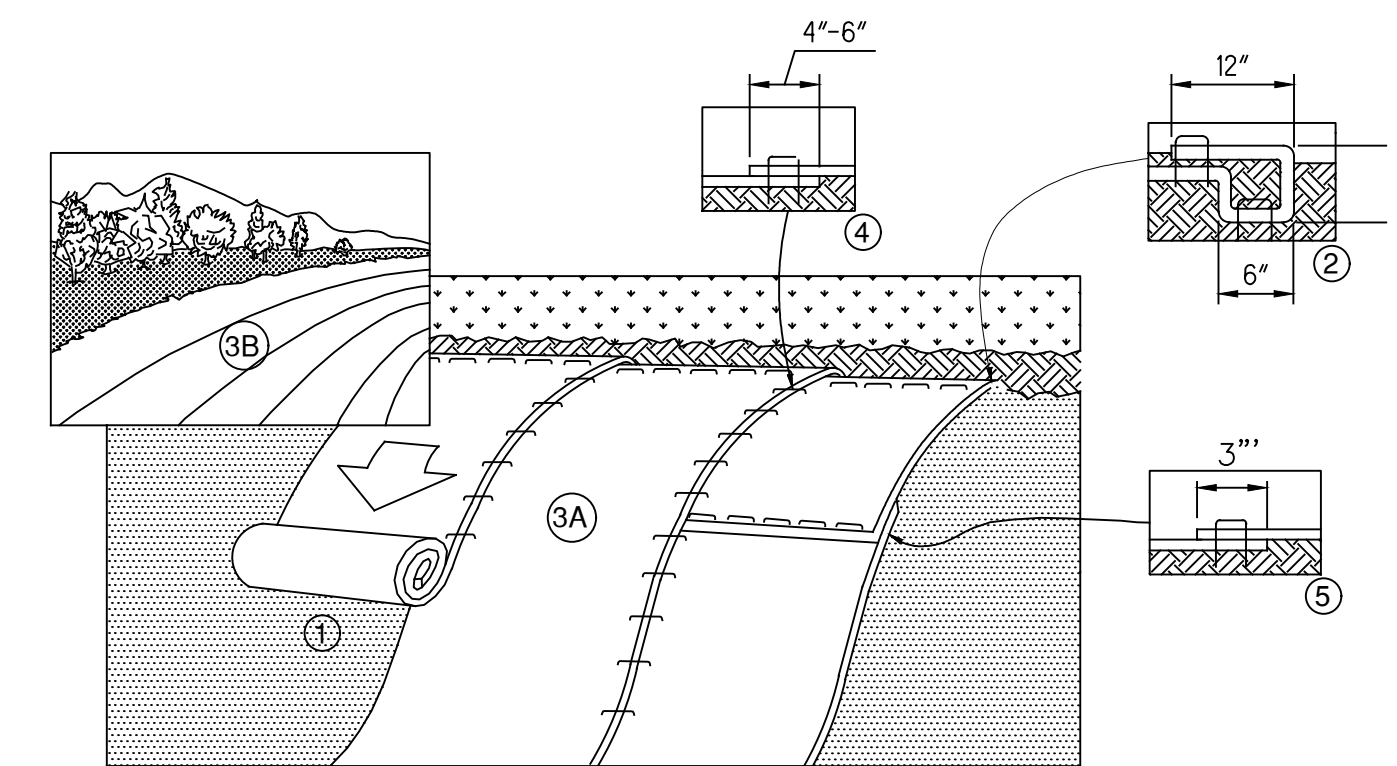
1. DIG TRENCH FOR KEY
2. PLACE LIVE WHIPS – 3 PER LINEAR FOOT, AGAINST BOTH SIDES OF THE TRENCH
3. CAREFULLY PLACE ROCK
4. BACKFILL AND COVER WITH SOIL – DO NOT COMPACT
5. SEED WITH FLOODPLAIN MIX



NO SCALE



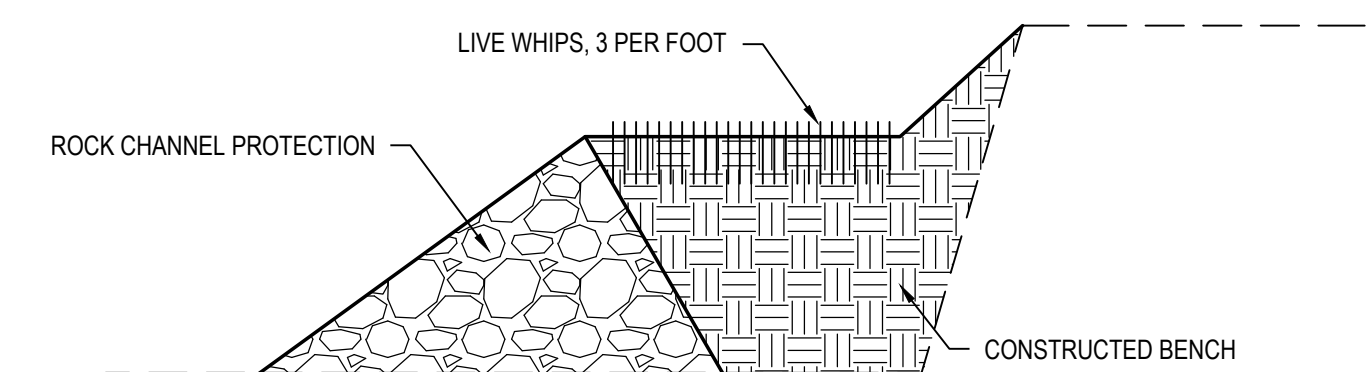
NO SCALE
NOTE: ALTERNATIVELY, BARE
ROOT PLANTS CAN BE INSTALLED
USING A DIBBLE BAR



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURER'S RECOMMENDATION.
 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 4"-6" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
 6. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.
- NOTES:
1. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
 2. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION.

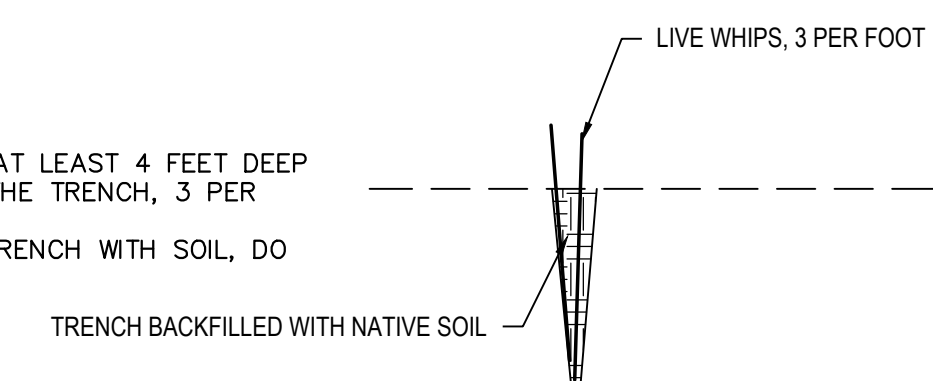
NOTE: CONTRACTOR SHALL ROLL
BLANKETS HORIZONTALLY (3B)

NOTE: CONTRACTOR SHALL ROLL
BLANKETS HORIZONTALLY (3B)



INSTALLATION SEQUENCE:

1. DIG NARROW TRENCH, AT LEAST 4 FEET DEEP
2. PLACE LIVE WHIPS IN THE TRENCH, 3 PER LINEAR FOOT
3. CAREFULLY BACKFILL TRENCH WITH SOIL, DO NOT COMPACT



NO SCALE