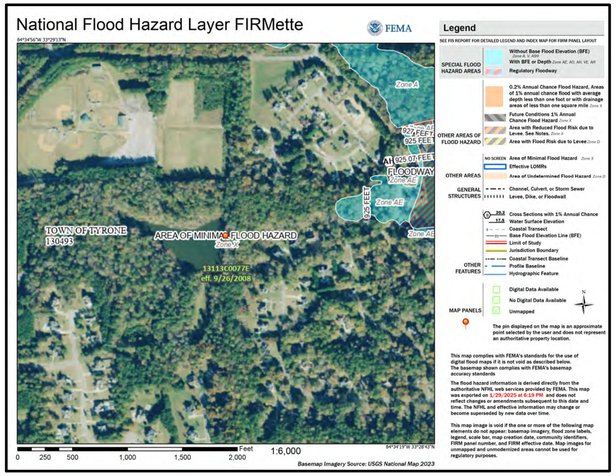
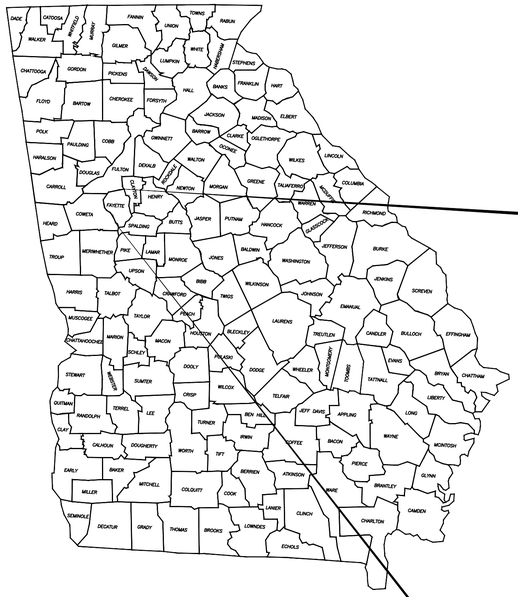


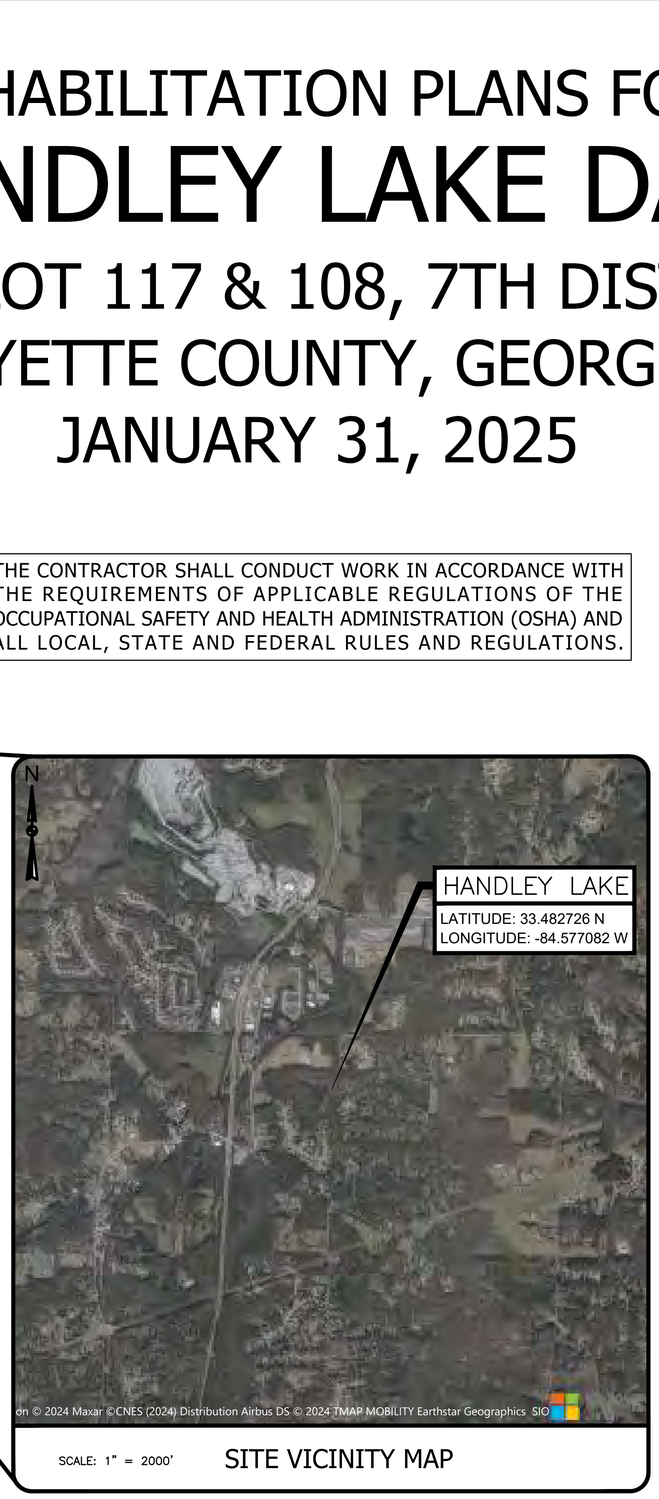
REHABILITATION PLANS FOR
HANDLEY LAKE DAM
LAND LOT 117 & 108, 7TH DISTRICT
FAYETTE COUNTY, GEORGIA
JANUARY 31, 2025

THE CONTRACTOR SHALL CONDUCT WORK IN ACCORDANCE WITH THE REQUIREMENTS OF APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND ALL LOCAL, STATE AND FEDERAL RULES AND REGULATIONS.

PROJECT DESCRIPTION

THE PROJECT INVOLVES THE REHABILITATION AND MODIFICATIONS TO AN EXISTING EARTHEN EMBANKMENT DAM AND ASSOCIATED SPILLWAY OUTLET WORKS. THE REHABILITATION/MODIFICATION MEASURES INCLUDE REMOVAL OF TREES AND OTHER INAPPROPRIATE VEGETATION FROM THE EMBANKMENT SLOPES, REGRADING THE EMBANKMENT TO INCLUDE FLATTENING THE DOWNSTREAM SLOPE, CONSTRUCTION OF AN EARTHEN AUXILIARY SPILLWAY CHANNEL, EXTENDING THE PRINCIPAL SPILLWAY OUTLET, CONSTRUCTION OF A REINFORCED-CONCRETE HEADWALL, AND INSTALLING A RIPRAP LINED SCOUR APRON. ALL DISTURBED AREAS SHALL BE STABILIZED WITH PERMANENT VEGETATION.





SCALE: 1" = 2000'

SITE VICINITY MAP

Sheet List Table	
Sheet Number	Sheet Title
01	COVER
02	GENERAL NOTES
03	ACCESS MAP
04	EXISTING SITE PLAN
05	PROPOSED SITE PLAN
06	PROPOSED PRINCIPAL SPILLWAY PLAN AND PROFILE
07	PIPE DETAILS
08	OUTLET HEADWALL DETAILS
09	AUX SPILLWAY PLAN AND PROFILE
10	ES&PC PLAN - CLEARING
11	ES&PC PLAN - GRADING
12	ES&PC PLAN - FINAL
13	ES&PC PLAN - DETAILS
14	ES&PC PLAN - NOTES (1 OF 2)
15	ES&PC PLAN - NOTES (2 OF 2)
16	GSWCC CHECKLIST AND NOTES

*ES&PC = EROSION, SEIDMENTATION, & POLLUTION CONTROL

PLANS PREPARED FOR (PERMITTEE):
SCOTT LANGFORD, PE
PUBLIC WORKS DIRECTOR & TOWN ENGINEER
950 SENOIA ROAD
TYRONE, GEORGIA 30290
CELL: (770) 487-4038
EMAIL: scott.langford@tyronega.gov

PLANS PREPARED BY:
SCHNABEL ENGINEERING, LLC.
6445 SHILOH ROAD, SUITE A
ALPHARETTA, GEORGIA 30005

24-HOUR ENGINEER CONTACT:
J. TYLER COATS, P.E.
PHONE: (770) 781-8008
CELL: (770) 324-2460
EMAIL: tcoats@schnabel-eng.com

24-HOUR EROSION CONTROL CONTACT
SCOTT LANGFORD
TOWN OF TYRONE
PHONE: (770) 487-4038

DATE	DESCRIPTION	REV

DESIGNED BY: MCG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

GEORGIA REGISTERED No. 35803 PROFESSIONAL ENGINEER JONATHAN TYLER COATS 01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

COVER

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET
01 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPW\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_COVER.DWG

GENERAL NOTES:

1. SCHNABEL ENGINEERING, LLC IS SOLELY RESPONSIBLE FOR THE PREPARATION OF THE REHABILITATION PLANS FOR THE SUBJECT DAM AND SPILLWAY SYSTEM. ADHERENCE TO THESE PLANS, AS WELL AS ADHERENCE TO GOVERNMENT AND COUNTY REGULATIONS, ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. CONTRACTOR TO VERIFY ALL CONDITIONS, ELEVATIONS AND DIMENSIONS BEFORE BEGINNING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER FOR JUSTIFICATION AND/OR CORRECTION BEFORE PROCEEDING WITH THE WORK. CONTRACTOR TO ASSUME RESPONSIBILITY FOR DISCREPANCIES WHICH ARE NOT REPORTED. ALL DIMENSIONS SHOULD BE READ OR CALCULATED.
3. CONTRACTOR TO HAVE ALL UTILITIES FIELD LOCATED AND CLEARLY MARKED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
4. THE CONTRACTOR SHALL CONDUCT ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND ALL LOCAL, STATE AND FEDERAL RULES AND REGULATIONS. PROPER SAFETY PROCEDURES ARE OF SPECIAL CONCERN ON THE PROJECT CONSIDERING THAT WORKERS WILL BE WORKING IN TRENCH EXCAVATIONS.
5. ALL MATERIALS AND WORK PERFORMED SHALL COMPLY WITH THE TECHNICAL SPECIFICATIONS OF THE PROJECT.
6. CONTRACTOR TO PROVIDE ENGINEER WITH AN AS-BUILT, FIELD-RUN TOPOGRAPHIC SURVEY PERFORMED BY A GEORGIA REGISTERED SURVEYOR AT THE CONCLUSION OF THE PROJECT. SURVEY SHALL BE PROVIDED IN .PDF AND .DWG FORMAT.

WATER CONTROL NOTES:

1. CONTRACTOR SHALL BUILD, MAINTAIN AND OPERATE ANY TEMPORARY DIKES, COFFERDAMS, CHANNELS, FLUMES, SUMPS AND OTHER TEMPORARY DIVERSION AND PROTECTIVE WORKS NEEDED TO DIVERT SURFACE WATER FROM THE CONSTRUCTION WORK WHILE CONSTRUCTION IS IN PROGRESS. DIVERSION OR RETENTION OF SURFACE WATERS WILL BE CONTINUED UNTIL SUCH TIME AS DETERMINED BY THE ENGINEER.
2. FOUNDATIONS FOR CONCRETE, AND OTHER PARTS OF THE CONSTRUCTION SITE, SHALL BE DEWATERED AND KEPT FREE OF STANDING WATER OR EXCESSIVELY MUDDY OR SOFT CONDITIONS AS NEEDED FOR PROPER EXECUTION OF THE CONSTRUCTION WORK.
3. DEWATERING METHODS FOR FOUNDATION CONSTRUCTION OR SUBGRADE PREPARATION THAT CAUSE A LOSS OF FINES FROM FOUNDATION OR SUBGRADE AREAS WILL NOT BE PERMITTED.
4. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGES INCURRED AS A RESULT OF THE LACK OF ADEQUATE SURFACE OR SUBSURFACE WATER CONTROL.
5. CONTRACTOR IS TO PROVIDE THE ENGINEER WITH A WATER CONTROL PLAN FOR REVIEW AND ACCEPTANCE PRIOR TO THE START OF CONSTRUCTION. INVESTIGATIONS SUGGEST THAT THE EXISTING OUTLET CONTROL STRUCTURE FOR THE POND INCLUDES A SMALL DIAMETER OPENING NEAR THE BASE OF THE STRUCTURE THAT MAY BE ASSOCIATED WITH A DRAIN PIPE AND VALVE. THE CONDITION AND OPERABILITY OF THIS ASSEMBLY IS UNKNOWN BY THE ENGINEER AND THE TOWN. AFTER LOCATION OF, EVALUATION OF, AND COORDINATION WITH THE TOWN AND ENGINEER REGARDING THE POTENTIAL LAKE DRAIN, THE CONTRACTOR MAY UTILIZE THE DRAIN TO DEWATER THE LAKE. IF THE CONTRACTOR INTENDS TO USE THE OUTLET CONTROL STRUCTURE DRAIN TO DEWATER THE LAKE, THE SUBMITTED CONTROL OF WATER PLAN SHALL INCLUDE THIS INTENTION AND INCLUDE CLOSE AND TIMELY COORDINATION WITH THE TOWN OF TYRONE WITH REGARD TO USE OF THE SPILLWAY. REGARDLESS OF USE TO DRAIN THE LAKE, THESE PLANS REQUIRE THAT THE DRAIN VALVE AND COMPONENTS BE IMPROVED TO WORKING CONDITIONS PRIOR TO THE COMPLETION OF THE PROJECT
6. A MINIMUM OF SEVEN (7) DAYS' PRIOR TO PERFORMING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL LOWER AND MAINTAIN THE POOL ELEVATION OF THE LAKE IN A DRAINED STATE UNTIL MODIFICATIONS AND IMPROVEMENTS TO THE DAM AND SPILLWAY OUTLET WORKS ARE COMPLETE. MINIMUM OF SEVEN (7) DAYS' PRIOR TO PERFORMING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL LOWER AND MAINTAIN THE POOL ELEVATION OF THE LAKE IN A DRAINED STATE UNTIL MODIFICATIONS AND IMPROVEMENTS TO THE DAM AND SPILLWAY OUTLET WORKS ARE COMPLETE.
7. THE CONTRACTOR'S CONTROL OF WATER PLAN SHALL INCLUDE CONSIDERATIONS AND ACTIVITIES ASSOCIATED WITH THE REMOVAL, DISPOSAL, AND/OR RELOCATION OF FISH AND OTHER AQUATIC SPECIES PRIOR TO OR DURING THE DEWATERING OF THE LAKE. THE CONTRACTOR SHALL COORDINATE WITH THE TOWN OF TYRONE TO DETERMINE ACCEPTABLE REMOVAL, DISPOSAL, AND/OR RELOCATION METHODS.

SOIL COMPACTION NOTES:

1. ALL AREAS TO RECEIVE STRUCTURAL FILL TO BE CLEARED AND STRIPPED FREE OF TOPSOIL, ROOTS, STUMPS, ORGANICS AND ALL OTHER DELETERIOUS MATERIAL.
2. SUBGRADE AREAS WHICH ARE EXCESSIVELY WET, SOFT, OR DEEMED OTHERWISE UNSUITABLE BY THE ENGINEER, SHALL BE UNDERCUT AND REPLACED WITH FILL MATERIALS AS RECOMMENDED BY THE ENGINEER AND COMPACTED IN ACCORDANCE WITH NOTE (4) OF THIS SECTION.
3. AREAS TO RECEIVE STRUCTURAL FILL SHALL BE BENCHED INTO EXISTING SLOPES (SEE DETAILS ON THIS SHEET), DENSIFIED, AND SHALL BE AT SUCH MOISTURE CONTENT THAT THE FILL SOILS CAN BE COMPACTED AGAINST THE SLOPE TO EFFECT A GOOD BOND BETWEEN THE FILL SOILS AND THE EXISTING SOILS.
4. STRUCTURAL FILL TO BE PLACED IN MAXIMUM 9-INCH LOOSE LIFTS AND COMPACTED TO AT LEAST 95% OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY AND BETWEEN OPTIMUM AND 4% ABOVE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D-698). HAND COMPACTED FILL, INCLUDING FILL COMPACTED BY MANUALLY DIRECTED POWER TAMPERS TO BE PLACED IN MAXIMUM 4-INCH LOOSE LIFTS AND COMPACTED TO AT LEAST 95% OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY AND BETWEEN OPTIMUM AND 4% ABOVE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D-698).
5. ALL FILL SOILS TO BE PLACED UNDER THE OBSERVATION OF THE ENGINEER OR HIS REPRESENTATIVE.
6. CONTRACTOR SHALL OBTAIN BORROW FROM ONSITE EXCAVATIONS, IF THE MATERIAL MEETS PROJECT REQUIREMENTS. SHOULD THE ONSITE MATERIAL NOT MEET PROJECT REQUIREMENTS OR BE OF INSUFFICIENT QUANTITY, CONTRACTOR SHALL IDENTIFY AN OFFSITE BORROW SOURCE THAT MEETS PROJECT REQUIREMENTS AND SUBMIT SOIL SAMPLES TO THE ENGINEER FOR REVIEW AND APPROVAL.
7. UTILIZE SHEEPSFOOT ROLLER TO COMPACT SOILS IN MASS GRADING/FILLING ACTIVITIES. MECHANICAL HAND TAMPERS WILL BE USED TO COMPACT SOIL AROUND, ABOVE OR ADJACENT TO STRUCTURES AND/OR CONDUITS WHERE THE USE OF LARGE SHEEPSFOOT ROLLERS MAY DAMAGE STRUCTURES. MECHANICAL HAND TAMPERS WILL BE USED WITHIN 3 FEET OF ALL STRUCTURES.

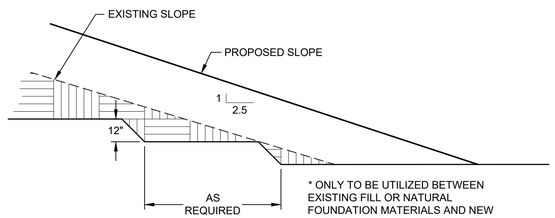
NOTES ON FILTER CONSTRUCTION:

1. DIAPHRAGM FILTER CONSTRUCTION WILL CONSIST OF INSTALLING FINE DRAIN AGGREGATE.
2. UTILIZE ASTM C-33 SAND FOR FINE DRAINAGE AGGREGATE. CONTRACTOR TO FURNISH ENGINEER WITH THE GRADATION OF ASTM C-33 SAND FROM SUPPLIER PRIOR TO USE. SAND FOR FINE DRAINAGE AGGREGATE SHALL BE NATURAL / RIVER RUN MATERIAL. SAND CREATED FROM ROCK CRUSHING OPERATIONS WILL NOT BE PERMITTED. SAND DERIVED FROM LIMESTONE OR OTHER MATERIALS HAVING EITHER CEMENTITIOUS OR SOLUTIONING PROPERTIES WILL NOT BE ACCEPTED. ENGINEER SHALL REVIEW AND APPROVE SOURCE OF SAND.
3. SOME MODIFICATIONS OF DRAIN LAYOUT MAY BE REQUIRED IN THE FIELD TO ACCOMMODATE EXISTING SITE TOPOGRAPHY.
4. INSTALLATION OF DIAPHRAGM FILTER WILL BE ACCOMPLISHED IN SUCH A MANNER THAT WORKER SAFETY IS NOT COMPROMISED IN ANY WAY. CONTRACTOR TO TAKE NECESSARY PRECAUTIONS TO PREVENT COLLAPSE OF TRENCH OR SLOPE INSTABILITY DURING INSTALLATION.
5. ALL GEOTEXTILE FABRIC UNDERLYING PROPOSED RIPRAP TO BE NON-WOVEN, NEEDLE-PUNCHED POLYPROPYLENE WITH A MINIMUM WEIGHT OF EIGHT (8) OUNCES PER SQUARE YARD, AND AN A.O.S. (U.S. SIEVE NO.) OF 80. GEOTEXTILE MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION. ALL GEOTEXTILE MATERIALS MUST BE DELIVERED TO THE JOB SITE IN FACTORY-INSTALLED PROTECTIVE WRAPPINGS WITH ATTACHED DOCUMENTATION CERTIFYING THE QUALITY AND CONDITION OF GEOTEXTILE. USE OF AN UNAPPROVED GEOTEXTILE WILL RESULT IN REMOVAL OF MATERIAL AT CONTRACTOR'S EXPENSE.

GENERAL NOTES FOR CONCRETE STRUCTURES:

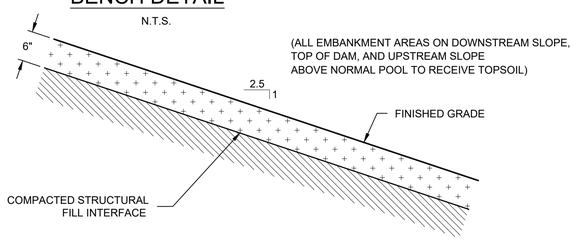
1. EXCEPT AS OTHERWISE NOTED OR SPECIFIED, THESE GENERAL NOTES SHALL APPLY TO THE CONCRETE STRUCTURES.
2. ALL CONCRETE SHALL CONFORM TO THE MOST RECENT EDITION OF "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES, ACI-350."
3. STRUCTURAL DESIGN IS BASED UPON CONCRETE WITH A COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS AND REINFORCEMENT WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI.
4. CONCRETE TESTING WILL BE IN COMPLIANCE WITH THE FOLLOWING ASTM STANDARDS: C31, C39, C138, C143, C172, C173, AND C231.
5. FOR REINFORCING STEEL
   a. FOR DEVELOPMENT AND LAP SPLICE LENGTH, REFER TO ACI 318 AND ACI 350.
   b. REINFORCEMENT SHALL HAVE A MINIMUM LENGTH OF 20'-0" BETWEEN SPLICES UNLESS OTHERWISE SHOWN.
   c. SPLICES SHALL NOT CROSS CONSTRUCTION OR CONTRACTION JOINTS.
   d. SPLICE DIMENSIONS SHOWN ARE MINIMUM VALUES. CONTRACTOR MAY ELECT TO UTILIZE LONGER SPLICE LENGTHS TO ACCOUNT FOR POTENTIAL CONSTRUCTION VARIANCES AT NO ADDITIONAL COST TO THE OWNER.
6. FOR DOWEL BARS:
   a. DOWEL BARS SHALL MEET THE REQUIREMENTS OF ASTM A36 AND ARE TO BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
   b. PLAIN DOWEL BARS SHALL BE 2 FEET LONG AND 3/4" DIAMETER SMOOTH STEEL.
   c. ONE-HALF OF EACH DOWEL BAR SHALL BE COATED WITH HEAVY GREASE TO PREVENT BOND WITH CONCRETE.
   d. DOWELS SHALL BE KEPT IN STRAIGHT ALIGNMENT, AS SHOWN IN THE PLANS, DURING AND SUBSEQUENT TO CONCRETE PLACEMENT.
   e. DOWELS SHALL BE SPACED 12 INCHES APART ALONG ALL CONTRACTION JOINTS UNLESS OTHERWISE NOTED.
7. CHAMFER ALL EXPOSED CORNERS 3/4" UNLESS OTHERWISE SHOWN OR DESIGNATED.
8. CUT OR BEND STEEL REINFORCING BARS AS NECESSARY TO INSTALL DRAIN PIPE OUTLETS.
9. JOINTS
   a. ADDITIONAL CONSTRUCTION JOINTS OR RELOCATION OF CONSTRUCTION JOINTS MAY BE USED IF APPROVED BY ENGINEER.
   b. CONSTRUCTION JOINTS SHALL BE AS SHOWN ON THE PLANS. UNDER NO CIRCUMSTANCES MAY A SECTION OF WALL BE POURED HIGHER THAN TEN FEET DURING ANY ONE PLACEMENT (UNLESS OTHERWISE SHOWN).
10. EMBEDDED MATERIALS
    a. BEFORE PLACING CONCRETE, CARE SHALL BE TAKEN THAT ALL EMBEDDED ITEMS ARE IN POSITION AND SECURELY FASTENED IN PLACE.
    b. ALL WATERSTOPS SHALL BE SUPPORTED AND PROTECTED FROM DAMAGE AND EXPOSURE.
11. CLEAR COVER TO REINFORCEMENT DISTANCE SHALL BE 2" FROM FORMED FACES/EDGES AND 3" FROM UNFORMED FACES/EDGES CAST AGAINST EARTH OR ROCK (UNLESS OTHERWISE SHOWN).

FILL MATERIALS		COMPACTION REQUIREMENTS						
DESCRIPTION	UNIFIED CLASS	PERCENT OF MAXIMUM DENSITY	MOISTURE LIMITS PERCENT OPTIMUM FROM	MOISTURE LIMITS PERCENT OPTIMUM TO	MAXIMUM LAYER THICKNESS INCHES UNCOMPACTED	MAX. ROCK SIZE IN INCHES	CONTROL TEST A.S.T.M. DESIGN
SANDY SILT	ML	95 (MIN)	OPT.	+4	9	6	ASTM D-698
SILTY SAND	SM	95 (MIN)	OPT.	+4	9	6	ASTM D-698
CLAYEY SAND	SC	95 (MIN)	OPT.	+4	9	6	ASTM D-698
LEAN CLAY	CL	95 (MIN)	OPT.	+4	9	6	ASTM D-698



BENCH DETAIL

N.T.S.



TOPSOIL DETAIL

N.T.S.

Know what's **below.** **Call** before you dig.

GEORGIA 811
CALL BEFORE YOU DIG
DIAL 811 OR CALL 1-800-282-7411
UTILITIES PROTECTION CENTER
IT'S THE LAW

TOPOGRAPHIC INFORMATION PROVIDED BY:

GEOSURVEY
MARIETTA, GEORGIA 30062

SURVEY DATED: 01/29/2024

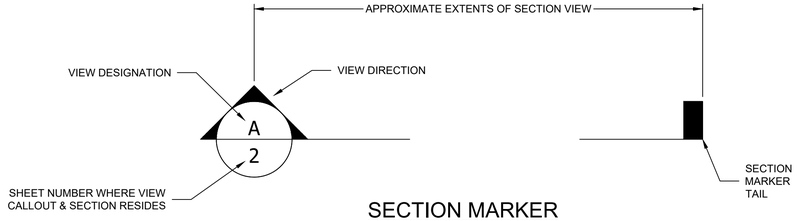
NOTE: CONTRACTOR MUST COORDINATE WORK WITH UTILITY PROVIDERS TO MAINTAIN UTILITY SERVICE AND A SAFE WORK SITE.

USACE JURISDICTIONAL WATERS DELINEATION PROVIDED BY:

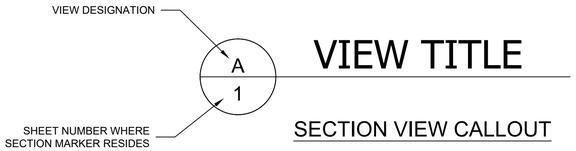
CORBLU
LAWRENCEVILLE, GEORGIA 30043

DATED: 11/08/2024

COORDINATES ARE BASED OFF THE GEORGIA WEST STATE PLANE COORDINATE SYSTEM AND ELEVATIONS ON NAVD 88.



SECTION MARKER



VIEW TITLE

SECTION VIEW CALLOUT

FLOW

FLOW ARROW

INDICATES DIRECTION OF FLOW

EXISTING TREE

GREATER THAN 18-INCHES IN DIAMETER

ABBREVIATIONS

B.F.	BOTH FACES	NTS, N.T.S.	NOT TO SCALE
B.I.G.	BREAK-IN-GRADE	N.P.	NORMAL POOL
BP, B.P.	BEGINNING POINT	O.P.	OUTSIDE DIAMETER
CJ,C.J.	CONSTRUCTION JOINT	O.F.	OUTSIDE FACE (BACKFILL SIDE)
C/L, CL, ℄	CENTER LINE	O/S	OFFSET FROM CENTERLINE
CMP, C.M.P.	CORRUGATED METAL PIPE	P-1	PIEZOMETERS (TYP.)
D.F.	DOWNSTREAM FACE	P.C.	POINT OF CURVATURE
DI, D.I.	DROP INLET	PI, P.I.	POINT OF INTERSECTION
DIA.	DIAMETER	PROP	PROPOSED
DIP, D.I.P.	DUCTILE IRON PIPE	PVC	POLYVINYL CHLORIDE PIPE
D/S	DOWNSTREAM	R	RADIUS
E.F.	EACH FACE	RCP, R.C.P.	REINFORCED CONCRETE PIPE
ELEV., EL.	ELEVATION	REF.	REFERENCE
E/P	EDGE OF PAVEMENT	STA.	STATION
EP, E.P.	END POINT	SS, S.S.	SANITARY SEWER
EXIST.	EXISTING	SSMH, S.S.M.H.	SANITARY SEWER MANHOLE
FT	FEET	TCJ, T.C.J.	TRANSVERSE CONTRACTION JOINT
HW, H.W.	HEADWALL	TP	TEST PIT
I.D.	INSIDE DIAMETER	TYP.	TYPICAL DETAIL
IE, I.E.	INVERT ELEVATION	U.F.	UPSTREAM FACE
I.F.	INSIDE FACE (FLOW SIDE)	U/S	UPSTREAM
INV.	INVERT	VC	VERTICAL CURVE
LF, L.F.	LINEAR FOOT	W.E.	WATER ELEVATION
M.S.L.	MEAN SEA LEVEL	W/O	WITHOUT

REV	DESCRIPTION	DATE

DESIGNED BY: MCG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

REGISTERED GEORGIA J. COATS No. 35803 PROFESSIONAL ENGINEER JONATHAN TYLER
01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-9003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

GENERAL NOTES

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET
02 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_COVER.DWG

NOTES:
1) CONSTRUCTION ACCESS ROAD SHALL REMAIN AFTER REMEDIATION MEASURES ARE COMPLETED AND HAVE A 8-INCH LAYER OF GRADED AGGREGATE BASE.
2) OVERHANGING TREES ALONG ACCESS ROAD SHALL BE CUT BACK TO ALLOW FOR VEHICLE ACCESS.

~DIRT & GRAVEL PATH~

CONSTRUCTION ROAD TURNOUTS AND STAGING AREA

BENCHMARK
5/8" RBR W/ CAP
N: 1267299.63
E: 2171416.00
EL: 942.94

VERTICAL PVC PIPE

OUTLET CONTROL STRUCTURE
TOP EL. 944.30
INV. AT NOTCH 941.0
OUT EL. 930.8

~HANDLEY LAKE~
NORMAL POOL EL. 941.0

FLOW

EDGE OF WATER AT TIME OF SURVEY

LIMITS OF TOPOGRAPHIC SURVEY
(SUPPLEMENTAL TOPOGRAPHY OUTSIDE THESE LIMITS OBTAINED FROM GIS SOURCES)

APPROXIMATE LIMITS OF CLEARING AND GRUBBING (AREA = 2.0 AC)

~EXISTING SOCCER FIELDS~

ACCESS ROAD
(APPROX. 880 FEET IN LENGTH)
(SEE DETAIL SHEET 13 OF 16)

ENTRANCE FROM HANDLEY PARK PARKING LOT

22'-0" 14'-0"

TOPOGRAPHIC INFORMATION PROVIDED BY:

GEOSURVEY
MARIETTA, GEORGIA 30062

SURVEY DATED: 01/19/2024

SUPPLEMENTAL TOPOGRAPHIC INFORMATION:

USGS LIDAR FAYETTE COUNTY

SCALE: 1"=30'
0 30' 60'

DATE	DESCRIPTION	REV

DESIGNED BY: MCG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

REGISTERED GEORGIA No. 35803 PROFESSIONAL ENGINEER J. TYLER COATS
01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

ACCESS MAP

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET 03 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

N/F PROPERTY OF
RICHARD & PATRICIA MILES
DEED BOOK 1292 / PAGE 510
PLAT BOOK 91 / PAGE 91-96
LOT 337

N/F PROPERTY OF
CURTIS & REBECCA BROOKS
DEED BOOK 5279 / PAGE 324
PLAT BOOK 91 / PAGE 91-96
LOT 336

N/F PROPERTY OF
RYAN & SHAWNA MCCONNELL
DEED BOOK 4214 / PAGE 53
PLAT BOOK 91 / PAGE 91-96
LOT 335

APPROX. 40-FOOT
DRAINAGE EASEMENT

LIMITS OF TOPOGRAPHIC SURVEY
(SUPPLEMENTAL TOPOGRAPHY OUTSIDE
THESE LIMITS OBTAINED FROM GIS SOURCES)

PROPERTY LINE (TYP.)

REMAINS OF
BARBED WIRE FENCE

DRAINAGE DITCH

DRAINAGE DITCH

CREEK

TREE LINE (TYP.)

EXISTING OUTLET HEADWALL
(TO BE REMOVED)

EXISTING CONDUIT
OUTLET INV. EL. 929.4

~TOP OF DAM~

~DIRT & GRAVEL PATH~

42-INCH RCP

BENCHMARK
5/8" RBR W/ CAP
N: 1267299.63
E: 2171416.00
EL: 942.94

OUTLET CONTROL STRUCTURE
TOP EL. 944.30
INV. AT NOTCH 941.0
OUT EL. 930.8

VERTICAL
PVC PIPE

EDGE OF WATER
AT TIME OF SURVEY

~HANDLEY LAKE~
NORMAL POOL EL. 941.0

FLOW

N/F PROPERTY OF
TOWN OF TYRONE GEORGIA
DEED BOOK 4647 / PAGE 447

BENCHMARK
5/8" RBR W/ CAP
N: 1266842.69
E: 2171299.85
EL: 947.22

TOPOGRAPHIC INFORMATION
PROVIDED BY:

GEOSURVEY
MARIETTA, GEORGIA 30062

SURVEY DATED: 01/19/2024

SUPPLEMENTAL
TOPOGRAPHIC INFORMATION:

USGS LIDAR FAYETTE
COUNTY

EXISTING SITE PLAN NOTES:

1. TREES LOCATED DURING SURVEY WITH DIAMETER GREATER THAN 18 INCHES ARE INDICATED. TREES WITH DIAMETERS LESS THAN 18 INCHES NOT SHOWN FOR CLARITY.

SCALE: 1"=20'
0 20' 40'

REV	DESCRIPTION	DATE

DESIGNED BY: ACG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

REGISTERED GEORGIA PROFESSIONAL ENGINEER No. 35803 JONATHAN TYLER COATS 01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

EXISTING SITE PLAN

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET
04 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

NOTE:

ALL TREES WITHIN THE LIMITS OF DISTURBANCE SHALL BE REMOVED IN ACCORDANCE WITH THE DETAIL SHOWN HERE.

Line Table: Alignments

Line #	Length	Direction	Start Point	End Point
L1	440.45	S4° 21' 59.28"W	(2171453.58,1267361.77)	(2171420.05,1266922.60)
L2	46.97	S38° 31' 50.29"W	(2171397.50,1266865.21)	(2171368.24,1266828.47)
L3	175.00	N67° 19' 06.34"E	(2171361.31,1267096.49)	(2171522.77,1267163.97)
L4	16.04	N18° 48' 46.04"E	(2171377.71,1267254.18)	(2171382.89,1267269.37)
L5	103.91	S85° 38' 00.72"E	(2171413.57,1267289.61)	(2171517.17,1267281.69)

Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C1	104.95	62.58	S21° 26' 54.78"W	(2171420.05,1266922.60)	(2171397.50,1266865.21)
C2	30.00	39.56	N56° 35' 22.66"E	(2171382.89,1267269.37)	(2171413.57,1267289.61)
C3	50.00	65.49	S48° 06' 33.01"E	(2171517.17,1267281.69)	(2171562.51,1267241.02)

N/F PROPERTY OF
RICHARD & PATRICIA MILES
DEED BOOK 1292 / PAGE 510
PLAT BOOK 91 / PAGE 91-96
LOT 337

APPROX. 40-FOOT DRAINAGE EASEMENT

LIMITS OF TOPOGRAPHIC SURVEY

N/F PROPERTY OF
CURTIS & REBECCA BROOKS
DEED BOOK 5279 / PAGE 324
PLAT BOOK 91 / PAGE 91-96
LOT 336

PROPERTY LINE (TYP.)

REMAINS OF BARBED WIRE FENCE

CREEK

LIMITS OF DISTURBANCE (CLEARING AND GRUBBING)

PROPOSED RIPRAP SCOUR APRON
(SEE DETAIL SHEET 06 OF 16)

PROPOSED EARTHEN TRAINING BERM

PROPOSED REINFORCED, CAST-IN-PLACE CONCRETE OUTLET HEADWALL
(SEE DETAIL SHEET 08 OF 16)

PROPOSED CONDUIT OUTLET INV. EL. 928.6

PROPOSED PIPE EXTENSIONS
(FOUR (4) TOTAL SEGMENTS)

PROPOSED DIAPHRAGM FILTER

PROPOSED DAM CREST EL. 945.5

CONSTRUCTION ROAD TURNOUTS AND STAGING AREA

CONSTRUCTION ROAD TURNOUTS AND STAGING AREA

ACCESS ROAD
(SEE SHEET 03 OF 16)

BENCHMARK
5/8" RBR W/ CAP
N: 1267299.63
E: 2171416.00
EL: 942.94

PROPOSED EARTHEN AUXILIARY SPILLWAY CONTROL SECTION = 940.5

EDGE OF WATER

72-INCH RCP

OUTLET CONTROL STRUCTURE
TOP EL. 944.30
INV. AT NOTCH 941.0
OUT EL. 930.8

VERTICAL PVC PIPE

PROPOSED DAM BASELINE

CENTERLINE OF PROPOSED AUXILIARY SPILLWAY
(SEE DETAIL SHEET 09 OF 16)

CENTERLINE OF PRINCIPAL SPILLWAY
(SEE DETAIL SHEET 06 OF 16)

~HANDLEY LAKE~
NORMAL POOL EL. 941.0

FLOW

N/F PROPERTY OF
TOWN OF TYRONE GEORGIA
DEED BOOK 4647 / PAGE 447

BENCHMARK
5/8" RBR W/ CAP
N: 1266842.69
E: 2171299.85
EL: 947.22

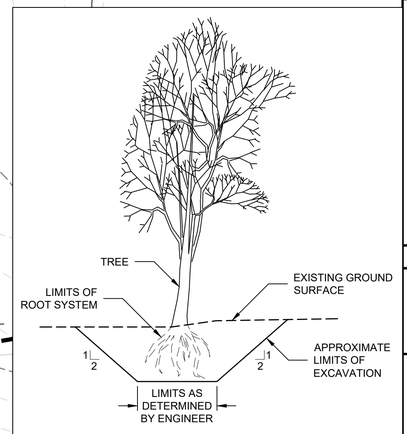
TOPOGRAPHIC INFORMATION PROVIDED BY:

GEOSURVEY
MARIETTA, GEORGIA 30062

SURVEY DATED: 01/19/2024

SUPPLEMENTAL TOPOGRAPHIC INFORMATION:

USGS LIDAR FAYETTE COUNTY



TREE REMOVAL DETAIL

N.T.S.

PROPOSED SITE PLAN NOTES:

1. CONTRACTOR SHALL DEWATER THE LAKE IN ACCORDANCE WITH THE CONTROL OF WATER PLAN A MINIMUM OF SEVEN (7) DAYS PRIOR TO INITIATING WORK.
2. DURING AND AFTER CLEARING AND GRUBBING ACTIVITIES ARE COMPLETED, TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN A LOCATION THAT DOES NOT IMPACT CONSTRUCTION ACTIVITIES WITHIN THE LIMITS OF DISTURBANCE.
3. HOLES AND/OR DEPRESSIONS RESULTING FROM CLEARING AND GRUBBING ACTIVITIES THAT ARE DEEPER THAN 15 INCHES SHALL BE FILLED AND COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
4. AFTER GRADING ACTIVITIES ARE COMPLETED, STOCKPILED TOPSOIL SHALL BE PLACED AND SPREAD TO A MINIMUM THICKNESS OF 4 INCHES ON THE DOWNSTREAM SLOPE OF THE DAM PRIOR TO FINAL STABILIZATION OF THE GROUND SURFACE WITH PERMANENT TURF.
5. THE CONTRACTOR MAY UTILIZE THE CONSTRUCTION ROAD TURNOUTS NORTH OF THE PROPOSED AUXILIARY SPILLWAY CHANNEL FOR TEMPORARY PARKING, MATERIAL STORAGE, AND EQUIPMENT STAGING.
6. CONSTRUCTION ROAD TURNOUTS SHALL BE CONSTRUCTED TO THE EXTENTS SHOWN USING THE SAME STONE AND GEOTEXTILE FABRIC SPECIFIED FOR THE ACCESS ROAD.

SCALE: 1"=20'
0 20' 40'

DATE	DESCRIPTION	REV

DESIGNED BY: ACG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

REGISTERED GEORGIA J. TYLER COATS No. 35803 PROFESSIONAL ENGINEER
JONATHAN TYLER COATS
01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

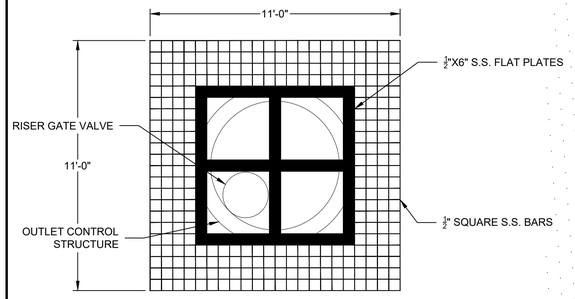
PROPOSED SITE PLAN

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET
05 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

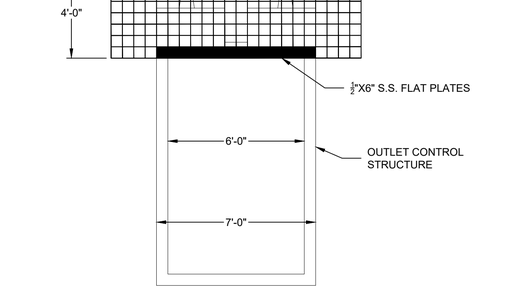
TRASH GUARD NOTES:

1. EXISTING OUTLET CONTROL STRUCTURE IS MISSING MANHOLE COVER/LID. DETERMINE SIZE AND TYPE OF COVER MISSING AND INSTALL SIMILAR TYPE.
2. PRIOR TO FABRICATION OF TRASH GUARD, CONTRACTOR SHALL FIELD MEASURE THE EXISTING OUTLET CONTROL STRUCTURE TO CONFIRM ACTUAL DIMENSIONS. IF ACTUAL DIMENSIONS OF OUTLET CONTROL STRUCTURE PRECLUDE CONTRACTOR'S ABILITY TO ACCURATELY FABRICATE AND INSTALL THE PROPOSED TRASH GUARD, CONTACT THE ENGINEER.
3. TRASH GUARD SHALL BE FABRICATED USING 1/2" SQUARE STAINLESS STEEL BARS AT 6-INCH SPACING AND 6" WIDE BY 1/2" THICK FLAT PLATES.
4. AFFIX TRASH GUARD TO OUTLET CONTROL STRUCTURE USING 1/2" DIAMETER STAINLESS STEEL WEDGE ANCHORS.
5. TRASH GUARD SHALL BE FABRICATED BY PROCESS EQUIPMENT & CONTROLS IN COVINGTON, GEORGIA, OR AN APPROVED SUPPLIER.



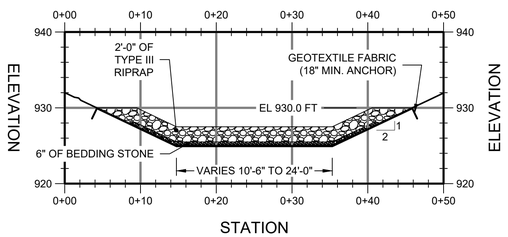
TRASH GUARD PLAN VIEW

SCALE: 1"=40'



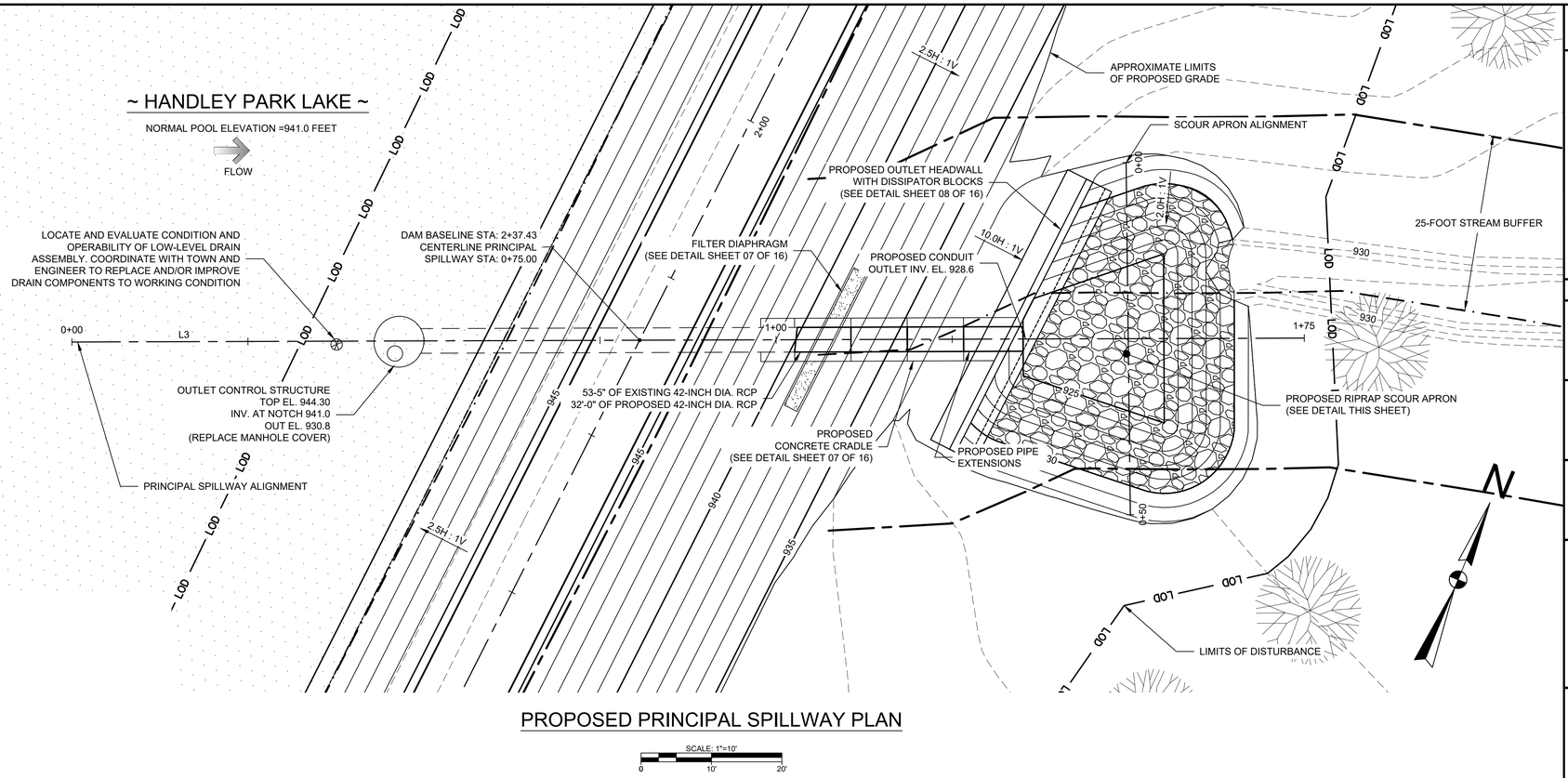
TRASH GUARD SECTION VIEW

SCALE: 1"=40'



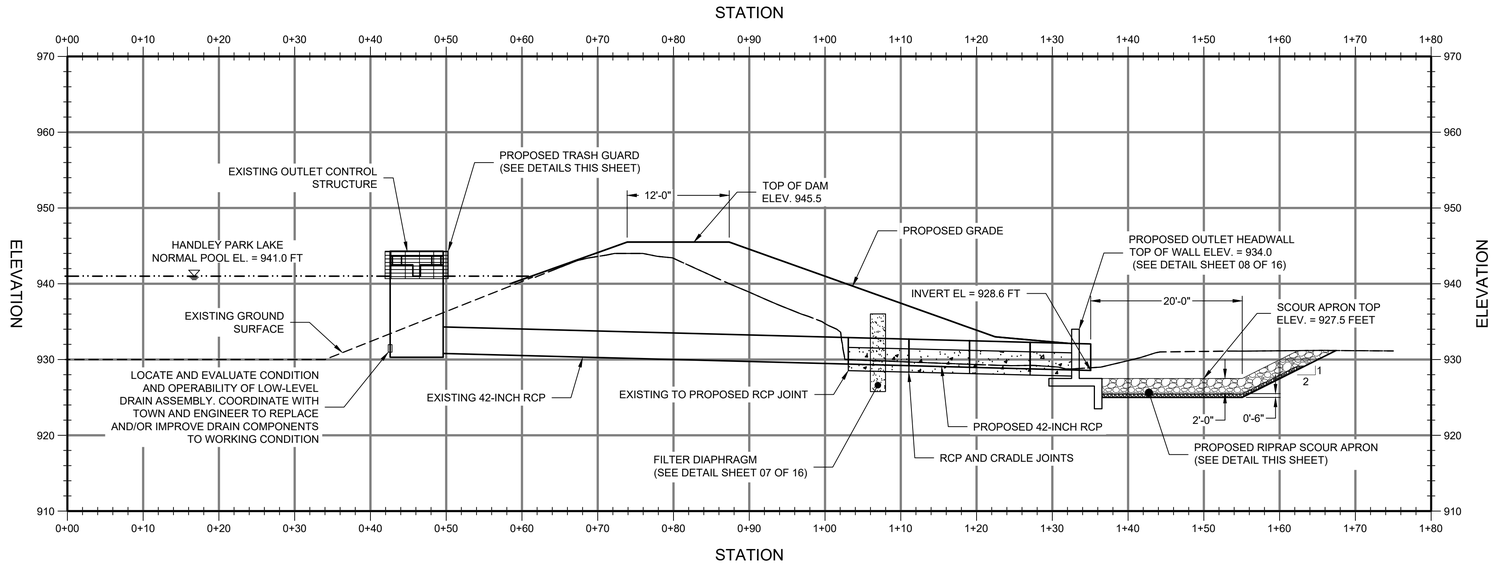
A SCOUR APRON DETAILS

N.T.S.



PROPOSED PRINCIPAL SPILLWAY PLAN

SCALE: 1"=10'



PROPOSED PRINCIPAL SPILLWAY PROFILE

SCALE: 1"=10'

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 / Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

PROPOSED PRINCIPAL SPILLWAY PLAN AND PROFILE

PROJECT: 24170042.000

DATE: JANUARY 2025

SHEET 06 OF 16

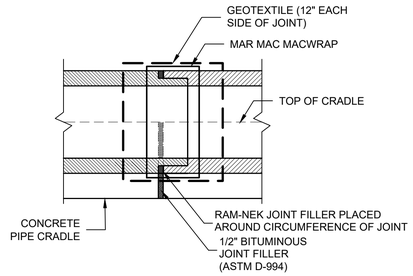
DESIGNED BY: MCG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

REGISTERED GEORGIA J. TYLER COATS No. 35803 PROFESSIONAL ENGINEER 01-31-2025

REV | DESCRIPTION | DATE

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

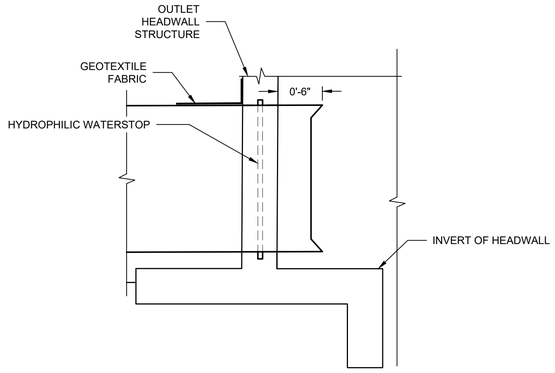


R.C.P. JOINT DETAIL

N.T.S.

NOTES:

1) WRAP ALL PIPE JOINTS WITH 8oz NON-WOVEN NEEDLE PUNCHED GEOTEXTILE. GEOTEXTILE SHALL EXTEND A MINIMUM OF 12 INCHES PAST THE PIPE JOINT IN BOTH DIRECTIONS.
2) MAR MAC TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS

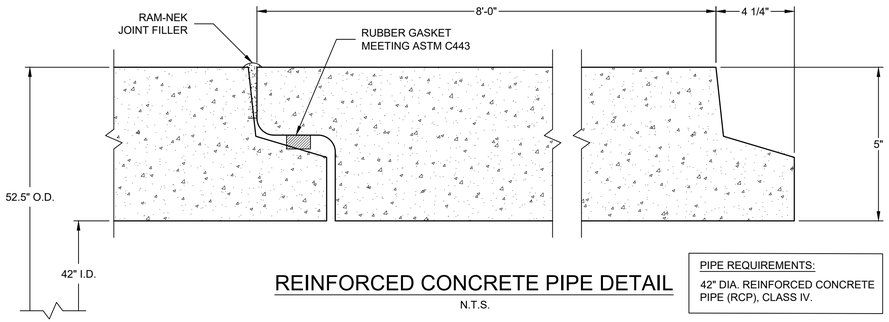


DETAIL OF PIPE/HEADWALL CONNECTION

N.T.S.

NOTES:

1. THE OUTLET CONDUIT SHALL BE INSTALLED PRIOR TO AND CAST-IN-PLACE WITH THE OUTLET HEADWALL.
2. CONTRACTORS SHALL IMPLEMENT MEASURES TO PROTECT THE CONDUIT DURING THE PLACEMENT OF THE OUTLET HEADWALL.
3. THE MOST DOWNSTREAM CRADLE SEGMENT SHALL BE PLACED AFTER THE CONSTRUCTION OF THE HEADWALL.

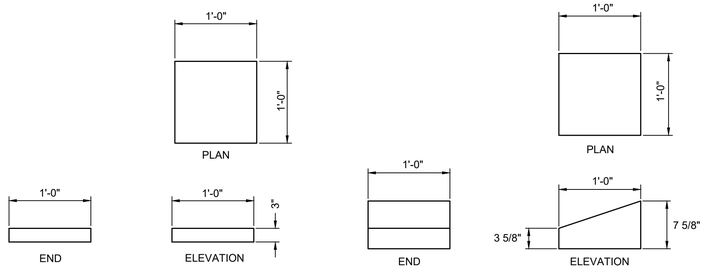


REINFORCED CONCRETE PIPE DETAIL

N.T.S.

PIPE REQUIREMENTS:

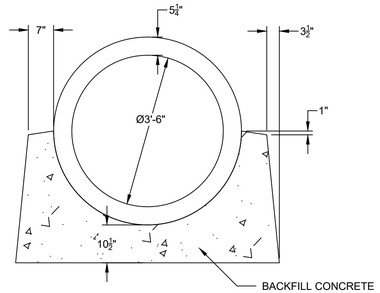
42" DIA. REINFORCED CONCRETE PIPE (RCP), CLASS IV.



DETAILS OF PIPE SUPPORT BLOCKS

N.T.S.

NOTE: SUFFICIENT BLOCKS SHALL BE PROVIDED TO SUPPORT THE PIPE TO THE REQUIRED LINE AND GRADE. THE CONTRACTOR SHALL DETERMINE THE NUMBER AND SIZE OF BLOCKS REQUIRED.

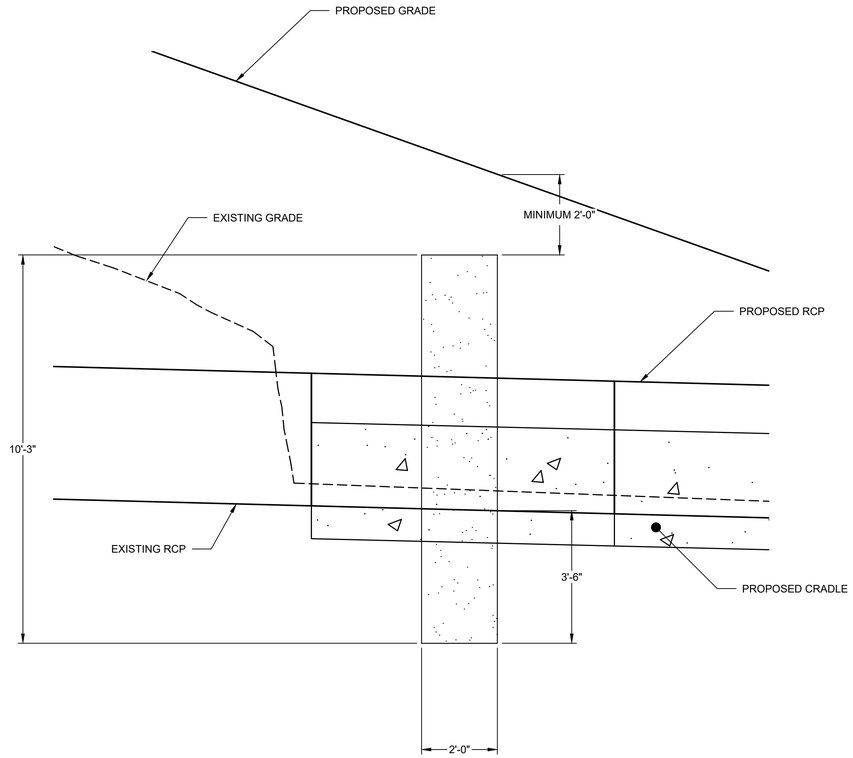


CRADLE DETAIL

N.T.S.

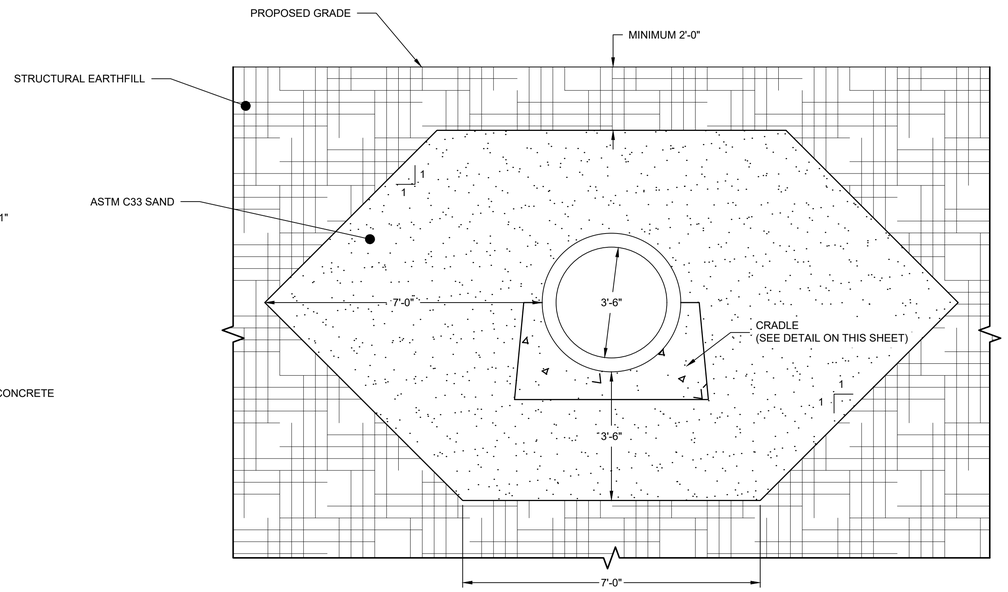
NOTE:

IF PIPE WALL THICKNESS IS DIFFERENT FROM THAT SHOWN HEREON, CONTACT ENGINEER FOR REVISED CRADLE DIMENSIONS.



DIAPHRAGM FILTER PROFILE

N.T.S.



DIAPHRAGM FILTER SECTION VIEW

N.T.S.

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

DESIGNED BY: MCG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

REGISTERED GEORGIA J. TYLER COATS No. 35803 PROFESSIONAL ENGINEER 01-31-2025

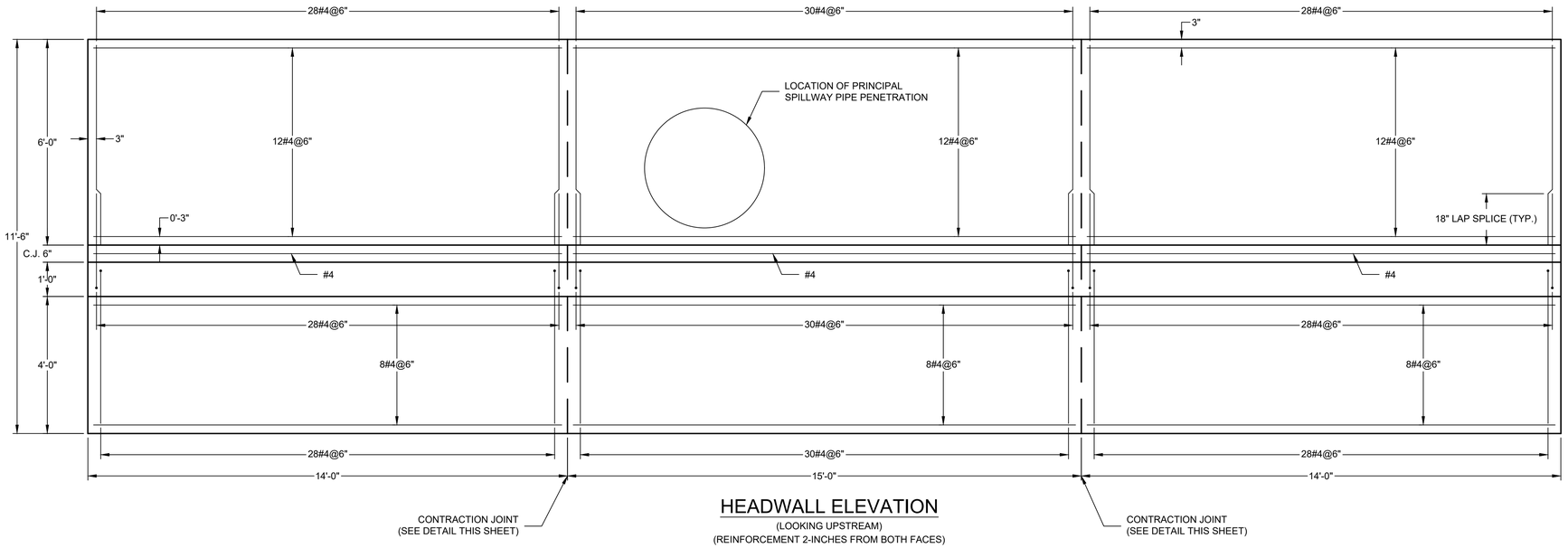
DATE | DESCRIPTION | REV

Schnabel ENGINEERING
6445 Shiloh Road, Suite A | Alpharetta, GA 30005 |
Phone: 770-781-8008 | Fax: 770-781-8003 |
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

PIPE DETAILS

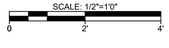
PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET 07 OF 16

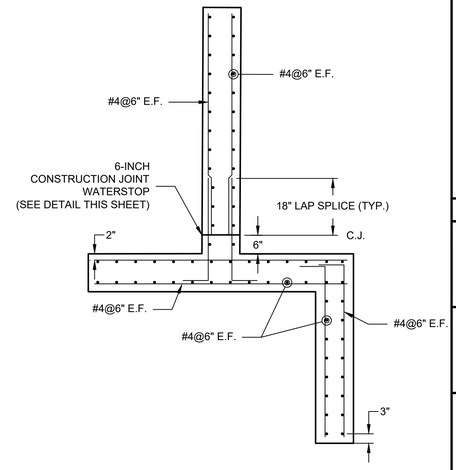


HEADWALL ELEVATION

(LOOKING UPSTREAM)
(REINFORCEMENT 2-INCHES FROM BOTH FACES)

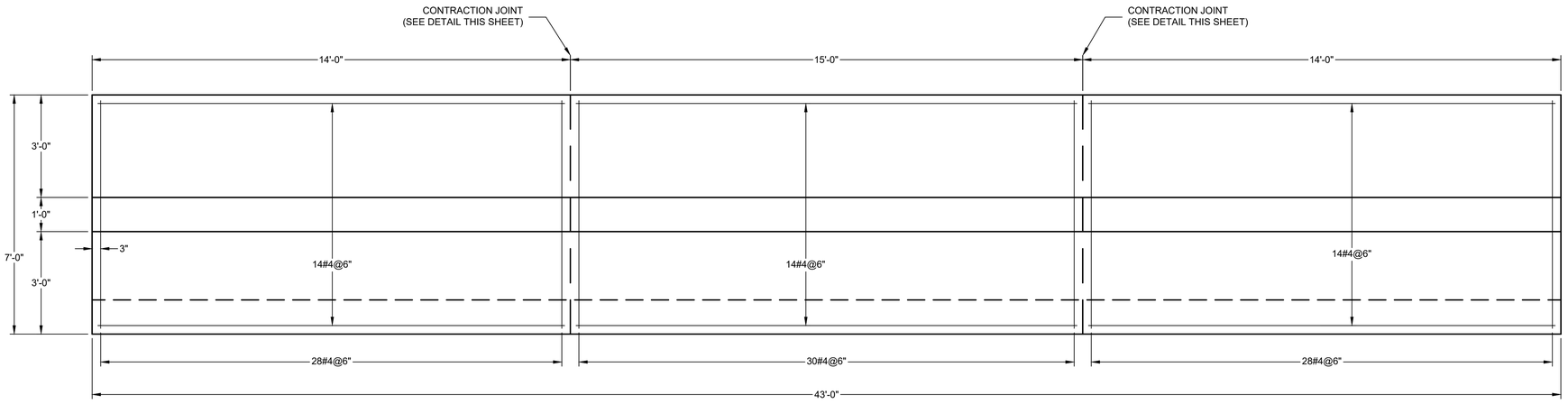
SCALE: 1/2"=1'0"





HEADWALL SECTION - REINFORCEMENT

SCALE: 1/2"=1'0"

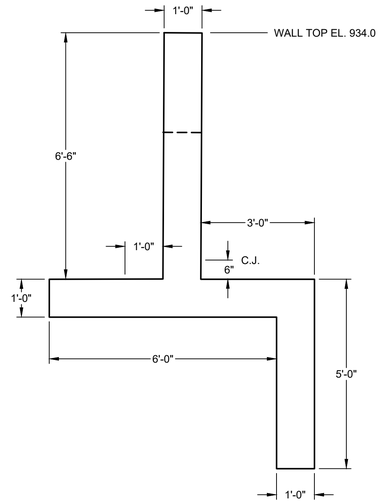


HEADWALL PLAN VIEW

(REINFORCEMENT 2-INCHES FROM TOP / 3-INCHES FROM BOTTOM)

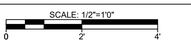
SCALE: 1/2"=1'0"

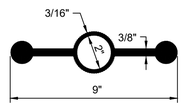
FLOW



HEADWALL SECTION - LAYOUT

SCALE: 1/2"=1'0"



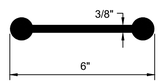


CONTRACTION JOINT WATERSTOP

N.T.S.

CONTRACTION JOINT NOTES:

1. MAINTAIN A CLEARANCE OF AT LEAST 1" BETWEEN WATERSTOP, REINFORCING STEEL, AND DOWEL BARS.
2. WATERSTOP SHALL BE SIKA #754, OR APPROVED EQUAL.

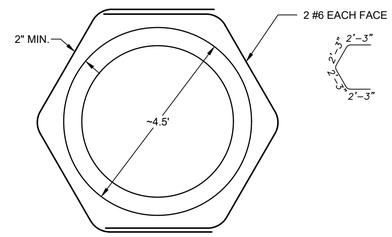


CONSTRUCTION JOINT WATERSTOP

N.T.S.

CONSTRUCTION JOINT NOTES:

1. MAINTAIN A CLEARANCE OF AT LEAST 1" BETWEEN WATERSTOP AND REINFORCING STEEL.
2. WATERSTOP SHALL BE SIKA #748, OR APPROVED EQUAL.



ADDITIONAL REINFORCEMENT AT PIPE OPENING

N.T.S.

NOTES:

1. VERTICAL AND HORIZONTAL STEEL MAY BE FIELD-CUT TO ACCOMMODATE PIPE OPENING. ADDITIONAL REINFORCEMENT SHALL BE PROVIDED AT THE PIPE OPENING ACCORDING TO THE DETAIL ON THIS SHEET. TWO INCHES OF COVER SHALL BE MAINTAINED BETWEEN REINFORCEMENT AND FORMED CONCRETE SURFACE. THREE INCHES OF COVER SHALL BE MAINTAINED BETWEEN REINFORCEMENT AND UNFORMED CONCRETE SURFACE.
2. STEEL SHOP DRAWINGS ARE TO BE PROVIDED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION OF RISER.

DESIGNED BY: MCG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE:
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

REV | DESCRIPTION | DATE

GEORGIA REGISTERED PROFESSIONAL ENGINEER
No. 35803
JONATHAN TYLER COATS

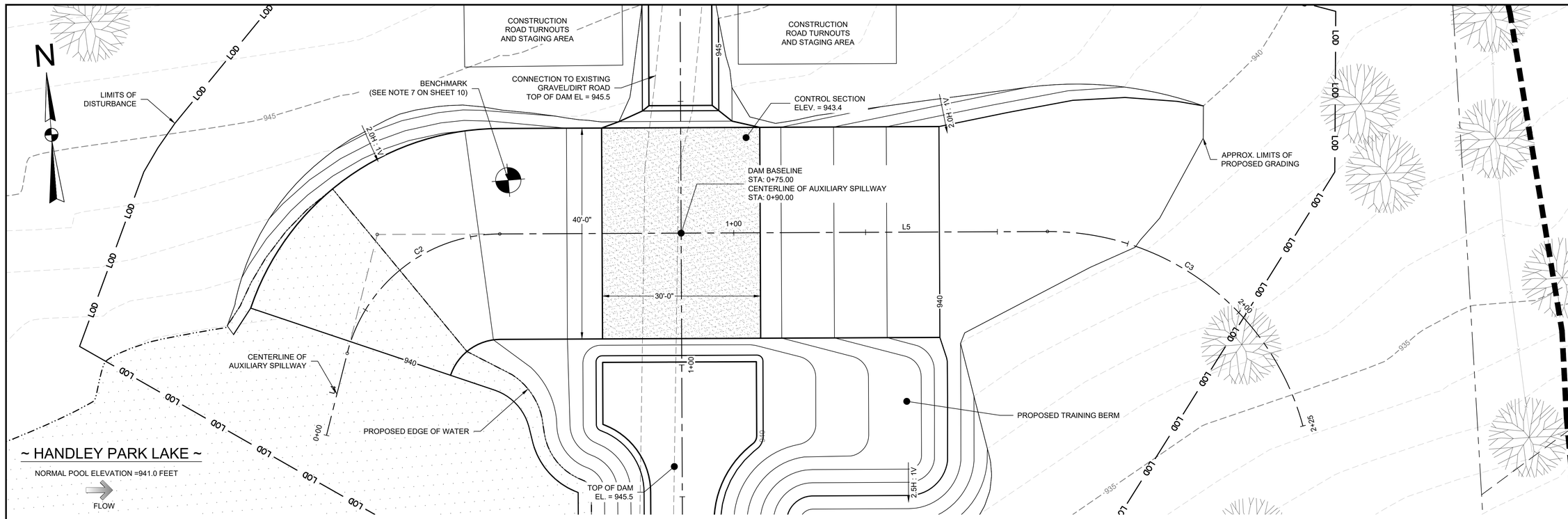
Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

OUTLET HEADWALL DETAILS

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET
08 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_WALL DETAILS.DWG

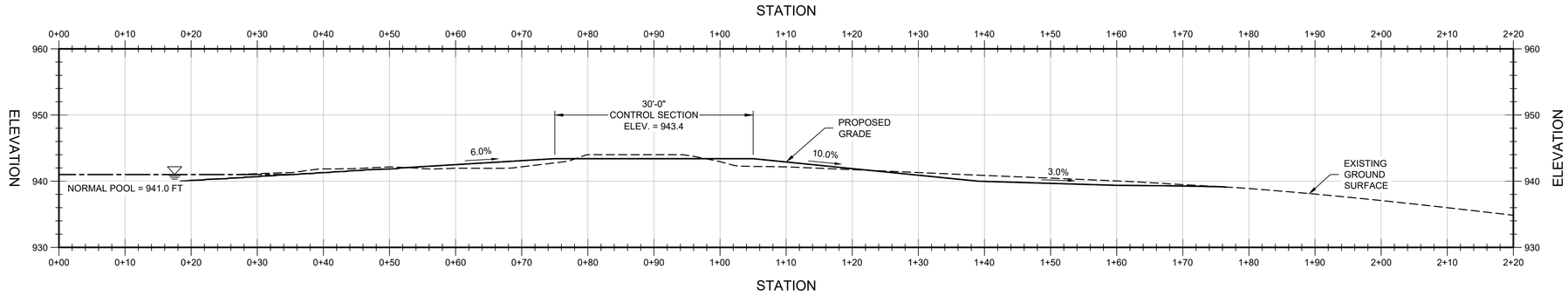


1 AUXILIARY SPILLWAY PLAN VIEW

SCALE: 1"=10'

0 10' 20'

HPD_AUX_SW_CL PROFILE



2 AUXILIARY SPILLWAY PROFILE VIEW

SCALE: 1"=10'

0 10' 20'

			DATE
			DESCRIPTION
			REV

DESIGNED BY: MCG
DRAWN BY: SEW
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803

GEORGIA REGISTERED J. TYLER COATS No. 35803 PROFESSIONAL ENGINEER JONATHAN TYLER 01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

AUX SPILLWAY PLAN AND PROFILE

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET 09 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

NOTES:

1) CONTRACTOR MUST COORDINATE WORK WITH UTILITY PROVIDERS TO MAINTAIN UTILITY SERVICE AND A SAFE WORK SITE.
2) ALL TREES AND OTHER INAPPROPRIATE VEGETATION SHALL BE CLEARED AND GRUBBED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
3) AFTER CLEARING PHASE BEST MANAGEMENT PRACTICES HAVE BEEN INSTALLED, THE CONTRACTOR SHALL IMPLEMENT DIVERSION OF WATER MEASURES IN ACCORDANCE WITH THE ENGINEER-APPROVED CONTROL OF WATER PLAN.
4) DIVERTED WATER SHALL BE MADE TO PASS THROUGH BMP's TO IMPROVE WATER QUALITY PRIOR TO THE DIVERTED WATER BEING DISCHARGED DOWNSTREAM OF THE PROJECT LIMITS OF DISTURBANCE.
5) IMPLEMENTATION OF THE CONTROL OF WATER PLAN SHALL CONTINUE UNTIL THE COMPLETION OF CONSTRUCTION AND STABILIZATION OF THE SITE WITH PERMANENT BMP's.
6) MONITORING POINT 1 IS LOCATED ON THE SOUTH SIDE OF HANDLEY LAKE. COORDINATES ARE LOCATED ON SHEET 14 OF 16.
7) BENCHMARK AT NORTH END OF DAM SHALL BE RELOCATED OUT OF THE AUXILIARY SPILLWAY LOCATION BY A SURVEYOR, LICENSED IN THE STATE OF GEORGIA. THE RELOCATED COORDINATES SHALL BE PROVIDED TO THE ENGINEER AND INCLUDED IN THE FINAL SURVEY AT THE COMPLETION OF THE PROJECT.

SOILS LEGEND
Fayette County, Georgia (GA625)

MAP UNIT SYMBOL	MAP UNIT NAME	SLOPES	EROSION FACTOR, Kw
AmB	APPLING SANDY LOAM	2 TO 6%	
CeC	CECIL SANDY LOAM	6 TO 10%	
CfC2	CECIL SANDY CLAY LOAM	6 TO 10%	ERODED
W	WATER		
WH	WEHADKEE SOILS	0 TO 2%	FREQUENTLY FLOODED

Know what's below. Call before you dig.

GEORGIA 811
CALL BEFORE YOU DIG
DIAL 811 OR CALL 1-800-282-7411
UTILITIES PROTECTION CENTER
IT'S THE LAW

CfC2 WH CeC W AmB

LIMITS OF TOPOGRAPHIC SURVEY
EXISTING PROPERTY LINE
EXISTING BARBED WIRE FENCE
25-FOOT STATE STREAM BUFFER
MONITORING POINT 2 (SEE COORDINATES ON SHEET 14 OF 16)
DOWNSTREAM BUFFER DISTURBANCE (AREA = 3749.7 SQ. FT., LENGTH = 75 L.F.)
APPROXIMATE LIMITS OF CLEARING AND GRUBBING (AREA = 2.0 AC)
EXISTING 42-INCH RCP INV. EL. 929.4 FEET
ACCESS ROAD (SEE SHEET 03 OF 16 FOR BEST MANAGEMENT PRACTICES)
CONCRETE WASHOUT AREA (SEE DETAIL SHEET 13 OF 16)
~STAGING/ STOCKPILE LOCATION~
~DIRT & GRAVEL PATH~
25 FOOT STREAM BUFFER
EXISTING TOP OF DAM ELEVATION = 943.9 FEET
EXISTING PRINCIPAL SPILLWAY
BENCHMARK (SEE NOTE 7 ON THIS SHEET)
UPSTREAM BUFFER DISTURBANCE (AREA = 14264.3 SQ. FT.; LENGTH = 636 L.F.)
APPROXIMATE EDGE OF WATER
FLOW
~ HANDLEY PARK LAKE ~
NORMAL POOL ELEVATION = 941.0 FEET

BENCHMARK
5/8" RBR W/ CAP
N: 1266842.69
E: 2171299.85
EL: 947.22

SCALE: 1"=20'
0 20' 40'

24-HOUR EROSION CONTROL CONTACT
SCOTT LANGFORD
TOWN OF TYRONE
PHONE: (770) 487-4038

TOPOGRAPHIC INFORMATION PROVIDED BY:
GEOSURVEY
MARIETTA, GEORGIA 30062
SURVEY DATED: 01/19/2024

SUPPLEMENTAL TOPOGRAPHIC INFORMATION:
USGS LIDAR FAYETTE COUNTY

DATE	DESCRIPTION	REV

DESIGNED BY: MCG
DRAWN BY: KAB
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803
GSWCC LEVEL II CERTIFICATION NO. 0000020669

REGISTERED GEORGIA No. 35803 PROFESSIONAL ENGINEER J. TYLER COATS 01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A | Alpharetta, GA 30005 | Phone: 770-781-8008 | Fax: 770-781-8003 | schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

ES&PC PLAN - CLEARING

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET 10 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\09-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

NOTES:
1) CONTRACTOR MUST COORDINATE WORK WITH UTILITY PROVIDERS TO MAINTAIN UTILITY SERVICE AND A SAFE WORK SITE.
2) ALL DISTURBED AREAS ARE TO BE PERMANENTLY VEGETATED, SLOPES TRACKED IN AND MATTED WITHIN 7 DAYS OF ACHIEVING FINAL GRADE.
3) CONTRACTOR SHALL MAINTAIN CONTROL AND DIVERSION OF WATER MEASURES THROUGHOUT GRADING PHASE ACTIVITIES, AND IMPLEMENT BMPS FOR DIVERTED WATER.
4) MONITORING POINT 1 IS LOCATED ON THE WEST SIDE OF HANDLEY LAKE. COORDINATES ARE LOCATED ON SHEET SHEET 14 OF 16.

811 Know what's below. Call before you dig.

GEORGIA 811
CALL BEFORE YOU DIG
DIAL 811 OR CALL 1-800-282-7411
UTILITIES PROTECTION CENTER
IT'S THE LAW

LIMITS OF TOPOGRAPHIC SURVEY
EXISTING PROPERTY LINE
EXISTING BARBED WIRE FENCE
25-FOOT STATE STREAM BUFFER
MONITORING POINT 2 (SEE COORDINATES ON SHEET 14 OF 16)
DOWNSTREAM BUFFER DISTURBANCE (AREA = 3749.7 SQ. FT., LENGTH = 75 L.F.)
APPROXIMATE LIMITS OF CLEARING AND GRUBBING (AREA = 2.0 AC)
LIMITS OF GRADING
ACCESS ROAD (SEE SHEET 03 OF 16 FOR BEST MANAGEMENT PRACTICES)
CONCRETE WASHOUT AREA (SEE DETAIL SHEET 13 OF 16)
~STAGING/ STOCKPILE LOCATION~
DAM CREST EL. 945.5 FT
25 FOOT STREAM BUFFER
PROPOSED DAM BASELINE
BENCHMARK (SEE NOTE 7 ON SHEET 10)
EXISTING PRINCIPAL SPILLWAY
CENTERLINE OF PROPOSED AUXILIARY SPILLWAY (SEE DETAIL SHEET 09 OF 16)
CENTERLINE OF PRINCIPAL SPILLWAY (SEE DETAIL SHEET 06 OF 16)
UPSTREAM BUFFER DISTURBANCE (AREA = 14264.3 SQ. FT.; LENGTH = 636 L.F.)
PROPOSED EDGE OF WATER
FLOW
~ HANDLEY PARK LAKE ~
NORMAL POOL ELEVATION = 941.0 FEET
BENCHMARK
5/8" RBR W/ CAP
N: 1266842.69
E: 2171299.85
EL: 947.22

SCALE: 1"=20'
0 20' 40'

24-HOUR EROSION CONTROL CONTACT
SCOTT LANGFORD
TOWN OF TYRONE
PHONE: (770) 487-4038

TOPOGRAPHIC INFORMATION PROVIDED BY:
GEOSURVEY
MARIETTA, GEORGIA 30062
SURVEY DATED: 01/19/2024

SUPPLEMENTAL TOPOGRAPHIC INFORMATION:
USGS LIDAR FAYETTE COUNTY

REV	DESCRIPTION	DATE

DESIGNED BY: MCG
DRAWN BY: KAB
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803
GSWCC LEVEL II CERTIFICATION NO. 0000020669

REGISTERED GEORGIA No. 35803 PROFESSIONAL ENGINEER JONATHAN TYLER COATS 01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

ES&PC PLAN - GRADING

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET 11 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DPS\03_SEPRODUCTS\08-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

NOTES:
1) CONTRACTOR MUST COORDINATE WORK WITH UTILITY PROVIDERS TO MAINTAIN UTILITY SERVICE AND A SAFE WORK SITE.
2) ALL DISTURBED AREAS ARE TO BE PERMANENTLY VEGETATED, SLOPES TRACKED IN AND MATTED WITHIN 7 DAYS OF ACHIEVING FINAL GRADE.
3) MONITORING POINT 1 IS LOCATED ON THE WEST SIDE OF HANDLEY LAKE. COORDINATES ARE LOCATED ON SHEET SHEET 14 OF 16.

811 Know what's below. Call before you dig.

GEORGIA 811
CALL BEFORE YOU DIG
DIAL 811 OR CALL 1-800-282-7411
UTILITIES PROTECTION CENTER
IT'S THE LAW

LIMITS OF TOPOGRAPHIC SURVEY
EXISTING PROPERTY LINE
EXISTING BARBED WIRE FENCE
25-FOOT STATE STREAM BUFFER
MONITORING POINT 2 (SEE COORDINATES ON SHEET 14 OF 16)
DOWNSTREAM BUFFER DISTURBANCE (AREA = 3749.7 SQ. FT., LENGTH = 75 L.F.)
APPROXIMATE LIMITS OF CLEARING AND GRUBBING (AREA = 2.0 AC)
CONSTRUCTION ROAD TURNOUTS AND STAGING AREA
CONSTRUCTION ROAD TURNOUTS AND STAGING AREA
SEE NOTE 7 ON SHEET 10
ACCESS ROAD (SEE SHEET 03 OF 16 FOR BEST MANAGEMENT PRACTICES)
EXISTING PRINCIPAL SPILLWAY
CENTERLINE OF PROPOSED AUXILIARY SPILLWAY (SEE DETAIL SHEET 09 OF 16)
CENTERLINE OF PRINCIPAL SPILLWAY (SEE DETAIL SHEET 06 OF 16)
FLOW
~ HANDLEY PARK LAKE ~
NORMAL POOL ELEVATION = 941.0 FEET
25 FOOT STREAM BUFFER
DAM CREST EL. 945.5 FT
PROPOSED DAM BASELINE
UPSTREAM BUFFER DISTURBANCE (AREA = 14264.3 SQ. FT., LENGTH = 636 L.F.)
PROPOSED EDGE OF WATER
BENCHMARK
5/8" RBR W/ CAP
N: 1266842.69
E: 2171299.85
EL: 947.22

SCALE: 1"=20'
0 20' 40'

24-HOUR EROSION CONTROL CONTACT
SCOTT LANGFORD
TOWN OF TYRONE
PHONE: (770) 487-4038

TOPOGRAPHIC INFORMATION PROVIDED BY:
GEOSURVEY
MARIETTA, GEORGIA 30062
SURVEY DATED: 01/19/2024

SUPPLEMENTAL TOPOGRAPHIC INFORMATION:
USGS LIDAR FAYETTE COUNTY

DATE	DESCRIPTION	REV

DESIGNED BY: MCG
DRAWN BY: KAB
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035803
GSWCC LEVEL II CERTIFICATION NO. 0000020669

GEORGIA REGISTERED J. TYLER COATS No. 35803 PROFESSIONAL ENGINEER 01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 / Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

ES&PC PLAN - FINAL

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET 12 OF 16

O:\ALPHARETTA\2024\24170042_000_HANDLEY_PARK_DAM_DP\03_SEPRODUCTS\09-CAD\04-CONTRACT_DWGS\HPD_SITE PLANS.DWG

WASHOUT PROCEDURES

1. A SIGN SHALL BE INSTALLED WITHIN 30 FEET OF EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. WASHOUT FACILITY SHALL BE BOUND ON THREE SIDES WITH ORANGE TREE PROTECTION FENCE TO MARK LOCATION.

2. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

3. TEMPORARY WASHOUT FACILITIES SHALL HAVE A TEMPORARY PIT OR BERMED AREA OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS GENERATED DURING WASHOUT PROCEDURES.

4. PERFORM WASHOUT OF CONCRETE MIXERS, DELIVERY TRUCKS, AND OTHER DELIVERY SYSTEMS IN DESIGNATED AREAS ONLY.

5. WASH CONCRETE ONLY FROM MIXER CHUTES INTO APPROVED CONCRETE WASHOUT FACILITY. WASHOUT MAY BE COLLECTED IN AN IMPERMEABLE BAG OR OTHER IMPERMEABLE CONTAINMENT DEVICE FOR DISPOSAL.

6. PUMP EXCESS IN CONCRETE PUMP BIN BACK INTO CONCRETE MIXER TRUCK.

7. CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OFFSITE.

8. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHALL BE BROKEN UP, REMOVED, AND DISPOSED OF IN AN APPROVED INERT LANDFILL.

9. PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHALL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL. LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.

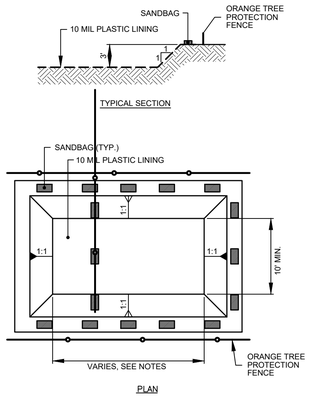
10. THE SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.

MAINTENANCE AND INSPECTION

1. TEMPORARY WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION. HARDENED CONCRETE MATERIALS SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED INERT LANDFILL.

2. EXISTING FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.

3. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED FOR DAMAGE (I.E. TEARS IN POLYETHYLENE, MISSING SANDBAGS, ETC.). DAMAGED FACILITIES SHALL BE REPAIRED.



CONCRETE WASTE MANAGEMENT DETAIL
NTS

811
Know what's below.
Call before you dig.

GEORGIA 811
CALL BEFORE YOU DIG
DIAL 811 OR CALL 1-800-282-7411
UTILITIES PROTECTION CENTER
IT'S THE LAW

NOTE: CONTRACTOR MUST COORDINATE WORK WITH UTILITY PROVIDERS TO MAINTAIN UTILITY SERVICE AND A SAFE WORK SITE.

24-HOUR EROSION CONTROL CONTACT
SCOTT LANGFORD
TOWN OF TYRONE
PHONE: (770) 487-4038

CONSTRUCTION ROAD STABILIZATION NOTES:

1. LIMITS OF PROPOSED CONSTRUCTION ROAD SHALL BE CLEARED, GRUBBED, AND GRADED TO A UNIFORM WIDTH PRIOR TO INSTALLATION OF STABILIZATION.

2. CONSTRUCTION ROAD SHALL BE 14 FEET WIDE MINIMUM.

3. STABILIZATION SHALL CONSIST OF A 8-INCH THICK LAYER OF GRADED AGGREGATE BASE UNDERLAIN BY GEOTEXTILE FABRIC.

4. DURING INSTALLATION, GRADED AGGREGATE BASE SHALL BE COMPACTED USING A VIBRATORY, SMOOTH DRUM ROLLER. A MINIMUM OF EIGHT (8) PASSES OF THE ROLLER SHALL BE PERFORMED TO ATTAIN ACCEPTABLE COMPACTION.

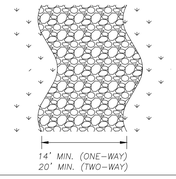
5. DURING USE, THE CONTRACTOR SHALL PERIODICALLY RE-GRADE AND RE-COMPACT THE CONSTRUCTION ROAD TO ADDRESS RUTS AND POTHOLES CREATED BY VEHICULAR TRAFFIC.

6. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PERFORM FINAL GRADING AND COMPACTION OF THE CONSTRUCTION ROAD AS PART OF DEMOBILIZATION ACTIVITIES.

Cr CONSTRUCTION ROAD STABILIZATION

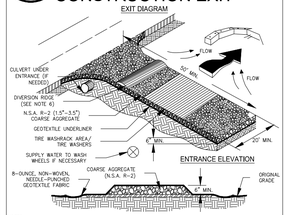
N.T.S.

DEFINITION: A TRAVELWAY CONSTRUCTED AS PART OF A CONSTRUCTION PLAN INCLUDING ACCESS ROADS, SUBDIVISIONS ROADS, PARKING AREAS, AND OTHER ON-SITE VEHICLE TRANSPORTATION ROUTES.
PURPOSE: TO PROVIDE A FIXED ROUTE FOR TRAVEL FOR CONSTRUCTION TRAFFIC AND REDUCE EROSION AND SUBSEQUENT REGRADING OF PERMANENT ROADBEDS BETWEEN TIME OF INITIAL GRADING AND FINAL STABILIZATION.



Co CRUSHED STONE CONSTRUCTION EXIT

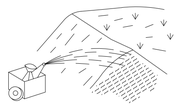
EXIT DIAGRAM



NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO AREA STABILIZED WITH CRUSHED STONE THAT MUST BE REMOVED IMMEDIATELY. REMOVAL SHALL BE DONE BEFORE THE END OF THE WORK DAY TO PREVENT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE.
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Ds2 DISTURBED AREA STABILIZATION (TEMPORARY SEEDING)

DEFINITION: THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS.
PURPOSE:
-TO REDUCE RUNOFF AND AND SEDIMENT DAMAGE OF DOWNSTREAM RESOURCES
-TO PROTECT THE SOIL SURFACE FROM EROSION
-TO IMPROVE WILDLIFE HABITAT
-TO IMPROVE AESTHETICS
-TO IMPROVE TILTH, INFILTRATION, AND AERATION AS WELL AS ORGANIC MATTER FOR PERMANENT PLANTINGS.



N.T.S.

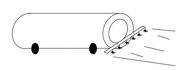
Ds3 DISTURBED AREA STABILIZATION (PERMANENT VEGETATION)

DEFINITION: THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.
PURPOSE:
-TO PROTECT THE SOIL SURFACE FROM EROSION
-TO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWN-STREAM AREAS
-TO IMPROVE WILDLIFE HABITAT AND VISUAL RESOURCES
-TO IMPROVE AESTHETICS

N.T.S.

Du DUST CONTROL ON DISTURBED AREAS

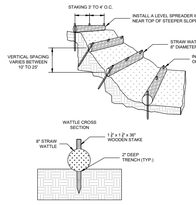
DEFINITION: CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS, AND DEMOLITION SITES.
PURPOSE:
-TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES
-TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE, OR SAFETY, OR TO ANIMALS OR PLANT LIFE



N.T.S.

EL EROSION CONTROL LOGS (WATTLE)

N.T.S.

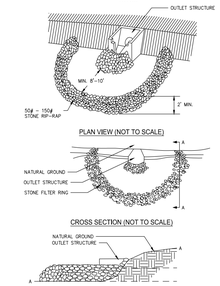


NOTE: WATTLES TO BE "AEC PREMIER STRAW WATTLES" AS MANUFACTURED BY AMERICAN EXCELSIOR COMPANY, OR AN APPROVED EQUAL.

NOTES:
1. ENDS OF WATTLES SHALL BE TURNED SLIGHTLY UP SLOPE.
2. RECOMMENDED STAKES ARE 1-1/8" WIDE x 1-1/8" THICK x 36" LONG. STAKES SHALL NOT EXTEND ABOVE THE STRAW WATTLE MORE THAN 2".

Fr STONE FILTER RING

N.T.S.

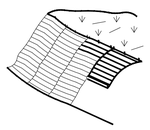


Ss EROSION CONTROL MATTING & BLANKETS

N.T.S.

EROSION CONTROL MATTING & BLANKETS

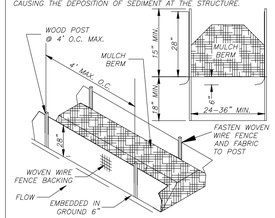
DEFINITION: A PROTECTIVE COVERING (BLANKET) OR SOIL STABILIZATION MAT USED TO ESTABLISH PERMANENT VEGETATION ON STEEP SLOPES, CHANNELS, OR SHORELINES.
PURPOSE:
-TO PROVIDE A MICROCLIMATE WHICH PROTECTS YOUNG VEGETATION AND PROMOTES ITS ESTABLISHMENT
-TO REINFORCE THE TURF TO RESIST FORCES OF EROSION DURING STORM EVENTS



TYPE C SEDIMENT BARRIER (DOUBLE ROW)

DOUBLE Sd1-C ROW

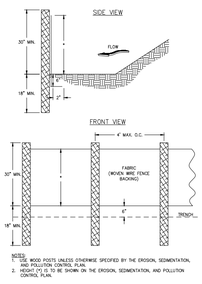
DEFINITION: TEMPORARY STRUCTURES TYPICALLY CONSTRUCTED OF SILT FENCE SUPPORTED BY STEEL OR WOOD POSTS. OTHER TYPES OF BARRIERS MAY INCLUDE SANDBAGS, STRAW BALES, BRUSH PILES, OR OTHER FILTERING MATERIAL.
PURPOSE: TO PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE AND ENTERING NATURAL DRAINAGE WAYS OR STORM DRAINAGE SYSTEM BY SLOWING STORM WATER RUNOFF AND CAUSING THE DEPOSITION OF SEDIMENT AT THE STRUCTURE.



N.T.S.

Sd1-C SEDIMENT BARRIER SINGLE ROW (TYPE C)

N.T.S.

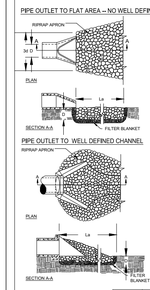


NOTES:
1. USE WOOD POSTS UNLESS OTHERWISE SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

St STORM DRAIN OUTLET PROTECTION

N.T.S.

PIPE OUTLET TO FLAT AREA – NO WELL DEFINED CHANNEL



NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.
5. RIPRAP-LINED PLUNGE POOL TO BE COMPOSED OF GDOT TYPE 1 RIPRAP UNDERLAIN WITH #57 STONE AND GEOTEXTILE FABRIC.

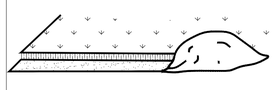
PIPE OUTLET TO WELL DEFINED CHANNEL

LOCATION	D (IN)	MAX FLOW (CFS)	Da (FT)	W1 (FT)	La (FT)	W2 (FT)	Y (FT/S)
St-1	42	86	0.8	10.5	21	26.5	8.9*

Tp TOPSOILING

N.T.S.

DEFINITION: STRIPPING OFF THE MORE FERTILE TOP SOIL, STORING IT, THEN SPREADING IT OVER THE DISTURBED AREA AFTER COMPLETION OF CONSTRUCTION ACTIVITIES.
PURPOSE: TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH ON AREAS WHERE OTHER MEASURES WILL NOT PRODUCE OR MAINTAIN A DESIRABLE STAND.



GEORGIA UNIFORM CODING SYSTEM

FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES
GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT		STONE	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION		STONE	A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below, or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE		FLEX	A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary, and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE		PIPE	A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE		STONE	Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER		STONE	A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL			A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING		STONE	A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER		SINGLE ROW	A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP		INLET	An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN		BASIN	A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP		TRAP	A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.
Sk	FLOATING SURFACE SKIMMER		SKIM	A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
Spb	SLOPE BERM		BERM	Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration, while creating multiple sedimentation chambers with the employment of intermediate dikes.
Sr	TEMPORARY STREAM CROSSING		STR	A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION		RIPRAP BASIN	A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN		TC	A floating or staked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain).
Tp	TOPSOILING		TOPSOIL	The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.
Tr	TREE PROTECTION		TREE PROTECTION	To protect desirable trees from injury during construction activity.
Wt	VEGETATED WATERWAY STORMWATER CONVEYANCE CHANNEL		WW	Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		Cs	Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)		Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM. SEEDING)		Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A permanent vegetative cover using sods on highly erodable or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
Fl-Co	FLOCCULANTS AND COAGULANTS		Fl-Co	Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING PERM. VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Tac	TACKIFIERS AND BINDERS		Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.

GaSWCC (Amended – 2013)

DESIGNED BY:	DRAWN BY:	CHECKED BY:
MCG	KAB	JTC

J. TYLER COATS, P.E.
GEORGIA PROFESSIONAL ENGINEER NO. PE035803
GSWCC LEVEL II CERTIFICATION NO. 0000020669
DATE: 01-31-2025

GEORGIA REGISTERED ENGINEER No. 35803 PROFESSIONAL PE ENGINEER JONATHAN TYLER COATS

REV	DESCRIPTION	DATE

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

ES&PC PLAN - DETAILS

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET
13 OF 16

SITE DESCRIPTION

PROJECT TYPE: REMEDIATION TO EXISTING EARTHEN DAM
PROJECT DESCRIPTION: THE PROJECT INVOLVES THE REHABILITATION AND MODIFICATIONS TO AN EXISTING EARTHEN EMBANKMENT DAM AND ASSOCIATED SPILLWAY OUTLET WORKS. THE REHABILITATION/MODIFICATION MEASURES INCLUDE REMOVAL OF TREES AND OTHER INAPPROPRIATE VEGETATION FROM THE EMBANKMENT SLOPES, REGRADING THE EMBANKMENT TO INCLUDE FLATTENING THE DOWNSTREAM SLOPE, CONSTRUCTION OF AN EARTHEN AUXILIARY SPILLWAY CHANNEL, EXTENDING THE PRINCIPAL SPILLWAY OUTLET, CONSTRUCTION OF A REINFORCED-CONCRETE HEADWALL, AND INSTALLING A RIPRAP LINED SCOUR APRON. ALL DISTURBED AREAS SHALL BE STABILIZED WITH PERMANENT VEGETATION.

See timeline below for intended sequence of major activities which disturb soils for major portions of the site.

PROJECT AREA: 2.0 AC

DISTURBED AREA: 2.0 AC

SCS CURVE NUMBER (PRE-CONSTRUCTION): 64

SCS CURVE NUMBER (POST-CONSTRUCTION): 64

STREAM BUFFERS & WETLANDS

STATE WATERS LOCATED ON OR WITHIN 200 FEET OF THIS SITE HAVE BEEN DELINEATED. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25-FOOT OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

WE ARE OF THE OPINION THAT WETLANDS ARE PRESENT WITHIN 200 FEET OF THE PROJECT SITE. CONSTRUCTION PLANS HAVE BEEN DESIGNED FOR ENCROACHMENT INTO WETLANDS. TOTAL WETLANDS IMPACTS: 631 SQ. FT. (0.014 ACRE)

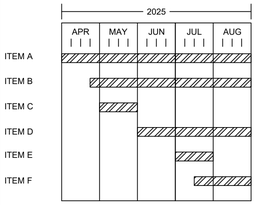
UPSTREAM BUFFER DISTURBANCE: 14,264.3 SQ. FT. (0.34 ACRE) ; 636 L.F.

DOWNSTREAM BUFFER DISTURBANCE: 3,749.7 SQ. FT. (0.09 ACRE); 75 L.F.

TOTAL BUFFER DISTURBANCE: 18,014.0 SQ. FT. (0.43 ACRE); 711 L.F.

STREAM DISTURBANCE: 375 SQ. FT.

CONSTRUCTION SCHEDULE



SCOPE ITEMS

A. INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES.

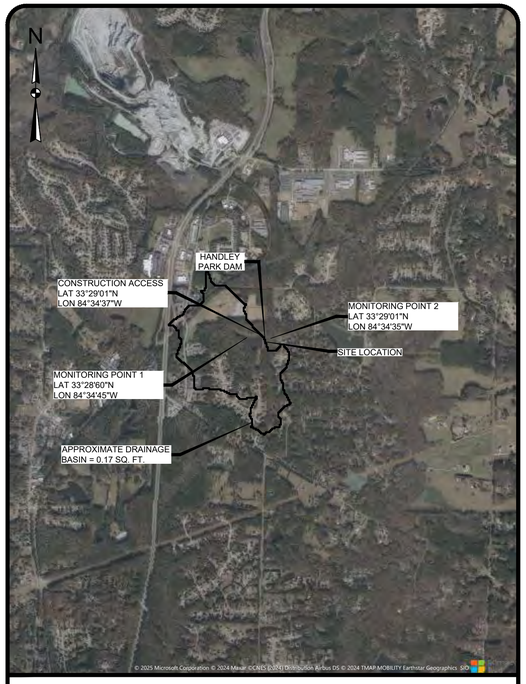
B. IMPLEMENT AND MAINTAIN CONTROL OF WATER MEASURES DURING CONSTRUCTION ACTIVITIES.

C. CLEAR AND GRUB PROJECT AREA.

D. REGRADE EMBANKMENT AND CONSTRUCT AUXILIARY SPILLWAY CHANNEL.

E. EXCAVATE FOR AND CONSTRUCT PROPOSED PRINCIPAL SPILLWAY OUTLET AND SCOUR APRON.

F. VEGETATE ALL AREAS AS REQUIRED DURING CONSTRUCTION OF THE PROJECT AS REQUIRED BY THE SEDIMENT AND EROSION CONTROL PLAN.



SCALE: 1" = 2000' SITE VICINITY MAP

GENERAL NOTES

EROSION CONTROL PROGRAM - CLEARING WILL BE KEPT TO A MINIMUM. VEGETATION AND/OR MULCH WILL BE APPLIED TO APPLICABLE AREAS IMMEDIATELY AFTER GRADING IS COMPLETED. SILT FENCES AND RIP-RAP WILL BE EMPLOYED TO PREVENT EROSION IN AREAS OF CONCENTRATED WATER FLOWS.

SEDIMENT CONTROL PLAN - ALL DISTURBED AREAS ARE TO BE VEGETATED. SEDIMENT CONTROL WILL BE ACCOMPLISHED BY THE VEGETATING OF ALL DISTURBED AREAS AND THE INSTALLATION OF SILT FENCES.

STANDARDS & SPECIFICATIONS - ALL DESIGNS AND ALL WORK WILL BE DONE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE PUBLICATION ENTITLED "MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA".

MAINTENANCE PROGRAM - ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND ANY DEFICIENCIES NOTED WILL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION. CLEANOUT OF SEDIMENT BARRIERS WILL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND DISPOSED OF BY SPREADING ON SITE. SEDIMENT BARRIERS WILL REMAIN UNTIL DISTURBED AREAS ARE STABILIZED. SEDIMENT FENCES AND BARRIERS WILL THEN BE REMOVED AND SURROUNDING AREAS VEGETATED. GUIDELINES FOR THE MAINTENANCE OF THE ESTABLISHED VEGETATED AREAS ARE TO BE PROVIDED TO THE OWNER WHEN DISTURBED AREAS ARE STABILIZED.

PRE-CONSTRUCTION MEETING - A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED, TO INCLUDE TOWN OF TYRONE STAFF, PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. PLEASE CALL 770-487-4038 TO COORDINATE SCHEDULING WITH TOWN OF TYRONE STAFF.

811
Know what's below.
Call before you dig.

GEORGIA 811
CALL BEFORE YOU DIG
DIAL 811 OR CALL 1-800-282-7411
UTILITIES PROTECTION CENTER
IT'S THE LAW

NOTE: CONTRACTOR MUST COORDINATE WORK WITH UTILITY PROVIDERS TO MAINTAIN UTILITY SERVICE AND A SAFE WORK SITE.

CERTIFICATIONS

1. I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR100001.

2. I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY DIRECT SUPERVISION.

3. I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE — DATE: 01-31-2025

J. TYLER COATS, P.E.
GEORGIA PROFESSIONAL ENGINEERING LICENSE NO. 35603
GSWCC LEVEL II CERTIFICATION NO. 0000020669

"I CERTIFY THAT AN INSPECTION OF THE INSTALLATION OF BEST MANAGEMENT PRACTICES, AS SHOWN ON THE PLANS, WILL BE MADE WITHIN 7 DAYS AFTER INITIAL CONSTRUCTION ACTIVITIES BEGIN."

ENGINEER — DATE: 01-31-2025

WASTE MATERIALS SHALL NOT BE DISCHARGED INTO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION IF ANY).

INVENTORY FOR POLLUTION PREVENTION PLAN:

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ON SITE DURING CONSTRUCTION:

CEMENT	PETROLEUM BASED PRODUCTS
DETERGENTS	WOOD
PAINTS	MASONRY BLOCKS
CONCRETE	CLEANING SOLVENTS
TAR	
FERTILIZER	

SPILL PREVENTION:

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.

ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER ROOF OR OTHER ENCLOSURE.

PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO INSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

HAZARDOUS PRODUCTS:

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS: ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS: FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENT OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED INTO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS: CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER OUTSIDE OF DESIGNATED AREA AS SHOWN ON THE PLANS.

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED, AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH HAZARDOUS SUBSTANCES.

SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEANUP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE AT LEAST THREE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

WASTE MATERIALS:

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY, AND TRASH BE HAULED AS REQUIRED BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ON-SITE.

ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED ON THE JOBSITE, AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTES:

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOBSITE SUPERINTENDENT, WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED, WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL DATA SAFETY SHEETS (MSDS'S) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOBSITE WILL BE OBTAINED AND USED FOR PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS WILL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED, AND ANOTHER COPY OF EACH MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOBSITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.

SANITARY WASTES:

A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED FOR EVERY TEN (10) WORKERS ON THE SITE. ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.

ALL SANITARY UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORM WATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMP'S MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORM WATER DISCHARGES. THE LOCATIONS OF SANITARY WASTE UNITS MUST BE IDENTIFIED ON THE INTERMEDIATE GRADING PHASE EROSION AND SEDIMENT CONTROL PLAN (SHEET 2) BY THE CONTRACTOR ONCE THE LOCATION HAS BEEN DETERMINED.

PRODUCT SPECIFIC PRACTICES:

PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLES AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS, AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS/FINISHES/SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIAL USED WITH THESE PRODUCTS, AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATION AND RECOMMENDATIONS.

CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER OUTSIDE OF DESIGNATED AREA AS SHOWN ON THE PLANS.

FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.

BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ON-SITE. ALL SUCH MATERIAL WILL BE DISPOSED OF BY PROPER WASTE DISPOSAL PROCEDURES.

SPILL CLEANUP AND CONTROL PRACTICES:

LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE MADE AVAILABLE TO SITE PERSONNEL.

MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GOGGLES, CAT LITTER, SAND, SAW DUST, AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.

SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS.

FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITH 24 HOURS AT 1-800-426-2675.

FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS.

FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.

FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ON-SITE. (THIS INCLUDES CAPACITIES OF EQUIPMENT), OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY OF 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

24-HOUR EROSION CONTROL CONTACT
SCOTT LANGFORD
TOWN OF TYRONE
PHONE: (770) 487-4038

DATE	DESCRIPTION	REV

DESIGNED BY: MCG
DRAWN BY: KAB
CHECKED BY: JTC

J. TYLER COATS, P.E.
DATE: 01-31-2025
GEORGIA PROFESSIONAL ENGINEER NO. PE035603
GSWCC LEVEL II CERTIFICATION NO. 0000020669

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 35603 J. TYLER COATS JONATHAN TYLER 01-31-2025

Schnabel ENGINEERING
6445 Shiloh Road, Suite A / Alpharetta, GA 30005 /
Phone: 770-781-8008 / Fax: 770-781-8003 /
schnabel-eng.com

HANDLEY PARK LAKE DAM
TOWN OF TYRONE
FAYETTE COUNTY, GEORGIA

ES&PC PLAN - NOTES (1 OF 2)

PROJECT: 24170042.000
DATE: JANUARY 2025
SHEET
14 OF 16

NOI INFORMATION

COVERAGE DESIRED: GAR100001 - STAND ALONE

I. SITE/OWNER/OPERATOR INFORMATION

GPS LOCATION OF CONSTRUCTION EXIT: LATITUDE 33°28'58"N LONGITUDE 84°34'38"W

II. SITE/OWNER/OPERATOR INFORMATION

CONSTRUCTION START DATE: APRIL 2025

COMPLETION DATE: AUGUST 2025

ESTIMATED DISTURBED ACREAGE: 2.0 AC

III. RECEIVING WATER INFORMATION

INITIAL RECEIVING WATER(S): UN-NAMED TRIBUTARY TO FLAT CREEK

__ TROUT STREAM X WARM WATER FISHERIES STREAM

RECEIVING WATER(S): FLAT CREEK

__ TROUT STREAM X WARM WATER FISHERIES STREAM

X SAMPLING OF STREAM(S) __ TROUT STREAM __ WARM WATER FISHERIES STREAM

__ SAMPLING OF OUTFALL(S) __ TROUT STREAM __ WARM WATER FISHERIES STREAM

NUMBER OF SAMPLING OUTFALLS: __ CONSTRUCTION SITE SIZE (AC): 2.0 AC.

APPENDIX B NTU VALUE: N/A SURFACE WATER DRAINAGE AREA (SQ. MI.): 0.17 SQ. MI.

APPENDIX B RATIONALE

APPENDIX B RATIONALE NOT APPLICABLE FOR RECEIVING STREAM SAMPLING. ONLY ≤25 NTU ALLOWED BETWEEN OUTFALL MONITORING POINTS FOR WARM WATER.

VEGETATIVE PLAN

ALL BARE AREAS RESULTING FROM CONSTRUCTION OPERATIONS WILL BE ESTABLISHED TO PERENNIAL VEGETATION AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETE.

A. INITIAL TREATMENT

SEEDBED PREPARATION - PREPARE SEEDBED TO A DEPTH OF AT LEAST 4 INCHES ON ALL AREAS WHERE A GOOD SEEDBED IS NOT PRESENT. REMOVE ROCKS, ROOTS, OR OTHER OBJECTS THAT WILL INTERFERE WITH VEGETATION ESTABLISHMENT OR MAINTENANCE OPERATIONS.

FERTILIZER - APPLY AGRICULTURAL LIME AT THE RATE OF 4,000 POUNDS PER ACRE. APPLY 1,500 POUNDS 6-12-12 ANALYSIS FERTILIZER (OR EQUIVALENT) PER ACRE, UNLESS SOIL SAMPLES INDICATE DIFFERENTLY. SPREAD LIME AND FERTILIZER UNIFORMLY OVER ALL AREAS IMMEDIATELY BEFORE FINAL LAND PREPARATION AND MIX THOROUGHLY WITH THE SOIL. APPLY TOP DRESSING OF 75 POUNDS PER ACRE OF AMMONIUM NITRATE (OR EQUIVALENT) WHEN PLANTS ARE 2 TO 4 INCHES TALL.

SEEDING - ALL GRASS WILL BE SEEDED OR SODDED WITH THE FOLLOWING. ALL SEEDING RATES BELOW REPRESENT PURE, LIVE, UNCOATED SEED:

DS3 - PERMANENT GRASSING	LBS./AC.	SEEDING DATES
BERMUDA, COMMON (UN-HULLED)	195.0	OCT. 1 TO FEB. 28
BERMUDA, COMMON (HULLED)	65.0	MAR. 1 TO JUL. 1
FESCUE, TALL (ALONE)	50.0	AUG. 1 TO OCT. 31
		MAR. 1 TO APR. 30
DS2 - TEMPORARY GRASSING		
MILLET, PEARL	50.0	APR. 15 TO AUG. 31
WHEAT (ALONE)	180.0	OCT. 1 TO DEC. 31
RYEGRASS, ANNUAL (ALONE)	40.0	AUG. 1 TO APR. 15

(1) PERMANENT GRASSING SHALL BE SEEDED ONLY DURING THE DATES INDICATED. TEMPORARY GRASSING IS TO BE SEEDED DURING OTHER DATES OF THE YEAR. CONTRACTOR SHOULD ANTICIPATE SEEDING TEMPORARY GRASS AT THE COMPLETION OF LAND DISTURBING ACTIVITIES AND RETURNING LATER (POTENTIALLY AFTER DEMOBILIZATION HAS OCCURRED) TO SEED PERMANENT GRASS. IF TEMPORARY GRASS IS SEEDED FIRST, THE TEMPORARY GRASS SHALL BE STRIPPED, THE SEED BED SHALL BE PREPARED, AND THE GROUND SHALL BE FERTILIZED PRIOR TO SEEDING PERMANENT GRASS.

SOIL ANALYSES SHALL BE PERFORMED TO EVALUATE PERCENTAGE OF NITROGEN, PHOSPHORUS, POTASH, SOLUBLE SALT CONTENT, ORGANIC MATTER CONTENT, AND pH VALUE. SOIL TESTS AT 6-INCH AND 12-INCH DEPTHS SHALL BE PERFORMED ON THE COMPLETED EMBANKMENT AND AUXILIARY SPILLWAY. SIX LOCATIONS SHALL BE TESTED ON BOTH THE EMBANKMENT AND AUXILIARY SPILLWAY. AREAS INDICATING POOR SOIL NUTRIENTS AND/OR pH SHALL BE AMENDED APPROPRIATELY TO THE FULL 12-INCH DEPTH.

*NOTE: RYEGRASS SHALL NOT BE USED IN ANY SEEDING MIXTURES CONTAINING PERENNIAL SPECIES DUE TO ITS ABILITY TO OUT-COMPETE DESIRED SPECIES CHOSEN FOR PERMANENT PERENNIAL COVER.

THE ENGINEER MAY ADJUST THE SEEDING DATES THIRTY (30) DAYS, EARLIER OR LATER, TO BETTER MEET SITE NEEDS AND COMPENSATE FOR VARIATIONS IN LOCAL CLIMATIC CONDITIONS.

ALL SEED WILL BE DISTRIBUTED UNIFORMLY OVER THE AREA.

FIRM SEEDED OR SODDED AREAS WITH CULTIPACKER OR ROLLER IMMEDIATELY FOLLOWING PLANTING.

MULCHING - ALL SEEDED AREAS STEEPER THAN 2 PERCENT WILL BE MULCHED IMMEDIATELY AFTER SEEDING BY SPREADING UNIFORMLY DRY STRAW OR HAY, FREE OF COMPETING WEEDS, AT THE RATE OF ABOUT 2 ½ TONS PER ACRE AND TO COVER APPROXIMATELY 75 PERCENT OF THE GROUND SURFACE. WHEN FEASIBLE, ANCHOR MULCH WITH A PACKER OR DISC HARROW WITH BLADES SET STRAIGHT OR WITH EMULSIFIED ASPHALT (GRADE AE5 OR SS1) AT A RATE OF 100 GALLONS EMULSION MIXED WITH 100 GALLONS WATER FOR EACH TON OF MULCH.

B. MANAGEMENT

APPLY ANNUAL APPLICATION OF 400 POUNDS OF 10-10-10 ANALYSIS FERTILIZER PER ACRE AND TOPDRESS WITH 30 POUNDS OF AMMONIUM NITRATE PER ACRE. APPLY AGRICULTURAL LIMESTONE AT THE RATE OF 1 TON PER ACRE EVERY 4 TO 6 YEARS.

REQUIRED STATEMENTS

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

ALL GRADED SLOPES 3:1 OR GREATER MUST BE HYDROSEEDED AND COVERED WITH GEORGIA DOT APPROVED WOOD FIBER MATTING OR COCONUT FIBER MATTING. IF NOT HYDROSEEDED, GEORGIA DOT APPROVED MATTING THAT HAS BEEN INCORPORATED WITH SEED AND FERTILIZER MUST BE USED. ALL SLOPES MUST BE PROPERLY PROTECTED UNTIL A PERMANENT VEGETATIVE STAND IS ESTABLISHED.

AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

MAINTENANCE

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

INSPECTIONS

A. PERMITTEE REQUIREMENTS.

(1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(2). MEASURE AND RECORD RAINFALL WITHIN DISCTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

(3). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS: (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. CERTIFIED PERSONNEL SHALL ALSO CONDUCT INSPECTIONS WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICH OCCURS FIRST). POST-RAIN INSPECTION WILL RESET THE 7-DAY INSPECTION FREQUENCY REQUIREMENT. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(4). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

(4). BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

(5). A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE, OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORTS SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2 OF THIS PERMIT.

SAMPLING REQUIREMENTS

THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

A. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:
(1) A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE SITE OR THE STAND ALONE CONSTRUCTION; (A) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES BASED ON MANDATORY FIELD VERIFICATION, INTO WHICH THE STORMWATER IS DISCHARGED AND (B) THE RECEIVING WATER AND/OR OUTFALL SAMPLING LOCATIONS. WHEN THE PERMITTEE HAS CHOSEN TO USE A USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS NOT SHOWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION OF THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP FROM WHERE THE STORMWATER(S) ENTERS THE RECEIVING WATER(S) TO THE POINT OF WHERE THE RECEIVING WATER(S) COMBINES WITH THE FIRST BLUE LINE STREAM SHOWN ON THE USGS TOPOGRAPHIC MAP;
(2). A WRITTEN NARRATIVE OF SITE SPECIFIC ANALYTICAL METHODS USED TO COLLECT, HANDLE AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING LOCATION;
(3). WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE SAMPLED, A RATIONALE MUST BE INCLUDED ON THE PLAN FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX B. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES); AND
(4). ANY ADDITIONAL INFORMATION EPD DETERMINES NECESSARY TO BE PART OF THE PLAN. EPD WILL PROVIDE WRITTEN NOTICE TO THE PERMITTEE OF THE INFORMATION NECESSARY AND THE TIMELINE FOR SUBMITTAL.

B. SAMPLE TYPE.
ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.
(1). SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
(2). SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
(3). LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
(4). MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
(5). SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

C. SAMPLING POINTS.
(1). FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLING POINTS SHALL BE LOCATED ON APPLICABLE PAGES OF THE INITIAL, INTERMEDIATE, AND FINAL PHASE OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS. SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:
(A). THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
(B). THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORMWATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
(C). IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORMWATER OUTFALL CHANNEL(S).
(D). CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.
(E). THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
(F). THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.

SAMPLING REQUIREMENTS (CONT'D)

(G). PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION).
(H). ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORMWATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.4. OR III.D.5.., WHICHEVER IS APPLICABLE.

D. SAMPLING FREQUENCY.
(1). THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN IN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.
(2). HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORMWATER DISCHARGE.
(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:
(A). FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;
(B). IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST;
(C). AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED;
(D). WHERE SAMPLING PURSUANT TO (A), (B), OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.a (6)., MUST INCLUDE WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED, PROVIDING THIS JUSTICIATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATION UNDER (A), (B), OR (C) ABOVE; AND
(E). EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.
*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

REPORTING

1. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORMWATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

2. ALL MONITORING RESULTS SHALL INCLUDE THE FOLLOWING INFORMATION:
   a. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;
   b. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;
   c. THE DATE(S) ANALYSES WERE PERFORMED;
   d. THE TIME(S) ANALYSES WERE INITIATED;
   e. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
   f. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;
   g. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS.
   h. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU," AND
   i. CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.

3. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE EPD DISTRICT OFFICE OR DELIVERY RECEIPT EMAIL TO THE APPROPRIATE EPD DISTRICT OFFICE RESOURCE MAILBOX ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

RETENTION OF RECORDS

1. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:

   A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;

   B. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;

   C. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;

   D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;

   E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT;

   F. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D. OF THIS PERMIT; AND

   G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2) OF THIS PERMIT.

2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPOR

GSWCC CHECKLIST

EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS

SWCD: FULTON COUNTY

PROJECT NAME: HANDLEY PARK LAKE DAM REMEDIATION
CITY/COUNTY: TOWN OF TYRONE, GA
NAME & EMAIL OF PERSON FILLING OUT CHECK LIST:

ADDRESS: 100 HANDLEY ROAD, TYRONE, GA 30290
DATE ON PLANS: JANUARY 31, 2025
J. TYLER COATS, P.E. (tcoats@schnabel-eng.com)

PLAN PAGE #	INCLUDED Y/N		TO BE SHOWN ON ES&PC PLAN
16	Y	1.	THE APPLICABLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED. (THE COMPLETED CHECKLIST MUST BE SUBMITTED WITH THE ES&PC PLAN OR THE PLAN WILL NOT BE REVIEWED)
10-16	Y	2.	LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL, (SIGNATURE, SEAL AND LEVEL II NUMBER MUST BE ON EACH SHEET PERTAINING TO ES&PC PLAN OR THE PLAN WILL NOT BE REVIEWED. THE LEVEL II CERTIFICATION MUST BE ISSED TO THE DESIGN PROFESSIONAL, AFTER COMPLETION OF A GSWCC APPROVED COURSE, AND WHOSE SIGNATURE AND SEAL ARE ON THE PLAN.)
14	Y	3.	LIMIT OF DISTURBANCE SHALL BE LESS THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE GAEPD DISTRICT OFFICE. IF GAEPD APPROVES THE REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME, THE PLAN MUST INCLUDE AT LEAST 4 OF THE BMPS LISTED IN APPENDIX 1 OF THIS CHECKLIST AND THE GAEPD APPROVAL LETTER.* (A COPY OF THE WRITTEN APPROVAL BY GAEPD MUST BE ATTACHED TO THE PLAN FOR THE PLAN TO BE REVIEWED.)
10-16	Y	4.	THE NAME AND PHONE NUMBER OF THE 24-HOUR LOCAL CONTACT RESPONSIBLE FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS.
01	Y	5.	PROVIDE THE NAME, ADDRESS, EMAIL ADDRESS, AND PHONE NUMBER OF PRIMARY PERMITTEE.
14-15	Y	6.	NOTE TOTAL AND DISTURBED ACREAGE OF THE PROJECT OR PHASE UNDER CONSTRUCTION.
14-15	Y	7.	PROVIDE THE GPS LOCATION OF THE CONSTRUCTION EXIT FOR THE SITE. GIVE THE LATITUDE AND LONGITUDE IN DECIMAL DEGREES.
01	Y	8.	INITIAL DATE OF THE PLAN AND THE DATES OF ANY REVISIONS MADE TO THE PLAN INCLUDING THE ENTITY WHO REQUESTED THE REVISIONS.
01,14	Y	9.	DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY AND EXISTING SITE CONDITIONS.
01,14	Y	10.	PROVIDE VICINITY MAP SHOWING SITE'S RELATION TO SURROUNDING AREAS. INCLUDE DESIGNATION OF SPECIFIC PHASE, IF NECESSARY.
15	Y	11.	IDENTIFY THE PROJECT RECEIVING WATERS AND DESCRIBE ALL SENSITIVE ADJACENT AREAS INCLUDING STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, MARSHLANDS, ETC. WHICH MAY BE AFFECTED.
14	Y	12.	DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE SITE WAS VISITED PRIOR TO DEVELOPMENT OF THE ES&PC PLAN AS STATED ON PART IV PAGE 19 OF THE PERMIT.
14	Y	13.	DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE PERMITTEE'S ES&PC PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BMPS AND SAMPLING TO MEET PERMIT REQUIREMENTS AS STATED ON PART IV PAGE 19 OF THE PERMIT.*
14	Y	14.	CLEARLY NOTE THE STATEMENT THAT "THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT AND CERTIFY THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION." IN ACCORDANCE WITH PART IV.A.5 PAGE 25 OF THE PERMIT.*
14	Y	15.	CLEARLY NOTE THE STATEMENT THAT "NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS."
10, 14	Y	16.	PROVIDE A DESCRIPTION OF ANY BUFFER ENCROACHMENTS AND INDICATE WHETHER A BUFFER VARIANCE IS REQUIRED.
15	Y	17.	CLEARLY NOTE THE STATEMENT THAT "AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL."*
14	Y	18.	CLEARLY NOTE THE STATEMENT THAT "WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT."*
15	Y	19.	CLEARLY NOTE STATEMENT THAT "THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES."
15	Y	20.	CLEARLY NOTE STATEMENT THAT "EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE."
15	Y	21.	CLEARLY NOTE THE STATEMENT "ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING."
15	Y	22.	ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORM WATER INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT MUST COMPLY WITH PART III. C. OF THE PERMIT. INCLUDE THE COMPLETED APPENDIX 1 LISTING ALL THE BMPS THAT WILL BE USED FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT.*
15	Y	23.	IF A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT (IDENTIFIED IN ITEM 22 ABOVE) AT LEAST SIX MONTHS PRIOR TO SUBMITTAL OF NOI, THE ES&PC PLAN MUST ADDRESS ANY SITE-SPECIFIC CONDITIONS OR REQUIREMENTS INCLUDED IN THE TMDL IMPLEMENTATION PLAN.*
13-14	Y	24.	BMPS FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF THE VEHICLES. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.*
14	Y	25.	PROVIDE BMPS FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS.
13	Y	26.	DESCRIPTION OF THE MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.*
14	Y	27.	DESCRIPTION OF PRACTICES TO PROVIDE COVER FOR BUILDING MATERIALS AND BUILDING PRODUCTS ON SITE.*
13-14	Y	28.	DESCRIPTION OF THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES.*

PLAN PAGE #	INCLUDED Y/N		TO BE SHOWN ON ES&PC PLAN
14	Y	29.	DESCRIPTION AND CHART OR TIMELINE OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR THE MAJOR PORTIONS OF THE SITE (I.E., INITIAL PERIMETER AND SEDIMENT STORAGE BMPS, CLEARING AND GRUBBING ACTIVITIES, EXCAVATION ACTIVITIES, UTILITY ACTIVITIES, TEMPORARY AND FINAL STABILIZATION).
15	Y	30.	PROVIDE COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY THE PRIMARY PERMITTEE.*
15	Y	31.	PROVIDE COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS.*
15	Y	32.	PROVIDE COMPLETE DETAILS FOR RETENTION OF RECORDS AS PER PART IV.F. OF THE PERMIT.*
15	Y	33.	DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION.*
15	Y	34.	APPENDIX B RATIONALE FOR NTU VALUES AT ALL OUTFALL SAMPLING POINTS WHERE APPLICABLE.*
14	Y	35.	DELINEATE ALL SAMPLING LOCATIONS ON ALL PHASES OF THE PLAN, AND PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.*
09-13	Y	36.	A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE INCLUDING: (1) INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS, (2) INTERMEDIATE GRADING AND DRAINAGE BMPS, AND (3) FINAL BMPS. FOR CONSTRUCTION SITES WHERE THERE WILL BE NO MASS GRADING AND THE INITIAL PERIMETER CONTROL BMPS, INTERMEDIATE GRADING AND DRAINAGE BMPS, AND FINAL BMPS ARE THE SAME, THE PLAN MAY COMBINE ALL OF THE BMPS INTO A SINGLE PHASE.*
10-12	Y	37.	GRAPHIC SCALE AND NORTH ARROW.
10-12	Y	38.	EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL IN ACCORDANCE WITH THE FOLLOWING:

MAP SCALE	GROUND SLOPE	CONTOUR INTERVALS, FT
1 INCH = 100FT or LARGER SCALE	FLAT 0 - 2%	0.5 or 1
	ROLLING 2 - 8%	1 or 2
	STEEP 8%+	2, 5, or 10

N/A	N/A	39.	USE OF ALTERNATIVE BMPS WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMPS AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY GAEPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION). PLEASE REFER TO THE ALTERNATIVE BMP GUIDANCE DOCUMENT FOUND AT www.gaswcc.georgia.gov.
N/A	N/A	40.	USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA 2016 EDITION.*
10-12	Y	41.	DELINEATION OF THE APPLICABLE 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS AND ANY ADDITIONAL BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY. CLEARLY NOTE AND DELINEATE ALL AREAS OF IMPACT.
10-12	Y	42.	DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE.
09	Y	43.	DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE.
14	Y	44.	PROVIDE HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH THE PRE- AND POST-DEVELOPED CONDITIONS.*
10	Y	45.	AN ESTIMATE OF THE RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED. FOR SOLAR FARM PROJECT, POST-CONSTRUCTION IMPERVIOUS AREA SHALL BE CALCULATED AS 70% OF TOTAL SOLAR PANEL SQUARE FOOTAGE.
13	Y	46.	STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION TO ACCOMMODATE DISCHARGES WITHOUT EROSION. IDENTIFY/DELINEATE ALL STORM WATER DISCHARGE POINTS.
10	Y	47.	SOIL SERIES FOR THE PROJECT SITE AND THEIR DELINEATION.
10-12	Y	48.	THE LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION.
15	Y	49.	PROVIDE A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED USING A TEMPORARY SEDIMENT BASIN, RETROFITTED DETENTION POND, AND/OR EXCAVATED INLET SEDIMENT TRAPS FOR EACH COMMON DRAINAGE LOCATION. SEDIMENT STORAGE VOLUME MUST BE IN PLACE PRIOR TO AND DURING ALL LAND DISTURBANCE ACTIVITIES UNTIL FINAL STABILIZATION OF THE SITE HAS BEEN ACHIEVED. A WRITTEN JUSTIFICATION EXPLAINING THE DECISION TO USE EQUIVALENT CONTROLS WHEN A SEDIMENT BASIN IS NOT ATTAINABLE MUST BE INCLUDED IN THE PLAN FOR EACH COMMON DRAINAGE LOCATION IN WHICH A SEDIMENT BASIN IS NOT PROVIDED. A WRITTEN JUSTIFICATION AS TO WHY 67 CUBIC YARDS OF STORAGE IS NOT ATTAINABLE MUST ALSO BE GIVEN. WORKSHEETS FROM THE MANUAL MUST BE INCLUDED FOR STRUCTURAL BMPS AND ALL CALCULATIONS USED BY THE DESIGN PROFESSIONAL TO OBTAIN THE REQUIRED SEDIMENT STORAGE WHEN USING EQUIVALENT CONTROLS. WHEN DISCHARGING FROM SEDIMENT BASINS AND IMPOUNDMENTS, PERMITTEES ARE REQUIRED TO UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE, UNLESS INFEASIBLE. IF OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE ARE NOT FEASIBLE, A WRITTEN JUSTIFICATION EXPLAINING THIS DECISION MUST BE INCLUDED IN THE PLAN.
10-12	Y	50.	LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. USE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND.
13	Y	51.	PROVIDE DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES. SPECIFICATIONS MUST, AT A MINIMUM, MEET THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
15	Y	52.	PROVIDE VEGETATIVE PLAN, NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES. INCLUDE SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. VEGETATIVE PLAN SHALL BE SITE SPECIFIC FOR APPROPRIATE TIME OF YEAR THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION OF GEORGIA.

*IF USING THIS CHECKLIST FOR A PROJECT THAT IS LESS THAN 1 ACRE AND NOT PART OF A COMMON DEVELOPMENT BUT WITHIN 200 FT OF A PERENNIAL STREAM THE * CHECKLIST ITEMS WOULD BE N/A.

EFFECTIVE JANUARY 1, 2025

CLEARING PHASE NOTES

PRIOR TO LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.

THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.

NO STAGING AREAS, MATERIAL STORAGE, CONCRETE WASH OUT AREAS, OR DEBRIS BURNING AND BURIAL HOLES SHALL BE LOCATED WITHIN 500 FEET OF DESIGNATED TREE PROTECTION AREAS.

A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON SITE AT ALL TIMES.

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, LIMITS OF LAND DISTURBANCE SHALL CLEARLY AND ACCURATELY BE DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS, AND SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE APPROVED PLANS.

PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.

THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY:

1. THE CONSTRUCTION EXIT SHALL BE PLACED AS SHOWN ON THE PLANS.
2. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION EXIT, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.
3. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITY.

WITHIN SEVEN (7) DAYS AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES, THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE PROJECT PROFESSIONAL DURING THE SITE INSPECTION.

AFTER APPROVAL OF INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT SEDIMENT PONDS AS SHOWN ON PLANS.

THE CONTRACTOR CAN UTILIZE CLEARED TREES AS BARRIER BRUSH SEDIMENT CONTROL WHERE INITIAL GRADING ACTIVITIES WILL NOT OCCUR.

NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.

ALL SILT FENCES MUST MEET THE REQUIREMENTS OF SECTION 171-TEMPORARY SILT FENCE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS, 1983 EDITION.

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.

SEDIMENT AND EROSION CONTROL MEASURES MUST BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICES IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1"-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM A VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE PROPER FUNCTIONING.

FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ONT HE SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED PLANS.

GRADING PHASE NOTES

DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES, AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.

EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE BUFFER AREAS.

EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCES OCCURS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION, AND ALTER THE LOCATION OF EROSION CONTROL DEVICES ACCORDINGLY. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSION IMMEDIATELY.

THE CONTRACTOR SHALL ESTABLISH BARRIERS AT THE TOP OF ALL SLOPES UNDER CONSTRUCTION. CUT AND FILL SLOPES SHALL NOT EXCEED 1H:1V.

ALL DRAINAGE SWALES AND GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED. MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.

SEDIMENT AND EROSION CONTROL MEASURES MUST BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

CONTRACTOR SHALL INSPECT MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1"-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM A VEHICLE ONTO PUBLIC ROAD WAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

FINAL PHASE NOTES

SEDIMENT AND EROSION CONTROL MEASURES SHALL BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

UPON COMPLETION OF THE PROJECT AND RECEIPT OF THE CERTIFICATE OF COMPLETION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED OTHERWISE ON THE PLANS.

PERMIT COVERAGE

THIS PLAN HAS BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE STATE OF GEORGIA, DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION (EPD), GENERAL PERMIT NO. GAR100001 FOR AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR COMMON DEVELOPMENTS.

MANAGEMENT PRACTICES AND PERMIT VIOLATIONS (PART III.D)

1. BEST MANAGEMENT PRACTICES ARE REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AND MUST BE IMPLEMENTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS CONTAINED IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF GEORGIA. PROPER DESIGN, INSTALLATION, AND MAINTENANCE OF BMP'S SHALL CONSTITUTE A COMPLETE DEFENSE TO ANY ACTION BY THE DIRECTOR OR TO ANY OTHER ALLEGATION OF NONCOMPLIANCE WITH PART III.D.3 AND PART III.D.4.
2. FAILURE TO PROPERLY DESIGN, INSTALL, OR MAINTAIN BMP'S SHALL CONSTITUTE A VIOLATION OF THE PERMIT. ROUTINE INSPECTIONS SHALL NOT BE CONSIDERED A VIOLATION. IF DURING THE COURSE OF THE PERMITTEE'S ROUTINE INSPECTIONS BMP FAILURES ARE OBSERVED WHICH HAVE RESULTED IN SEDIMENT DEPOSITION INTO WATERS OF THE STATE, THE PERMITTEE SHALL CORRECT THE BMP FAILURES AND SHALL SUBMIT A SUMMARY OF THE VIOLATIONS TO EPD IN ACCORDANCE WITH PART V.A.2 OF THE PERMIT.
3. A DISCHARGE OF STORMWATER RUNOFF FROM DISTURBED AREAS WHERE BMP'S HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH DISCHARGE RESULTS IN THE TURBIDITY OF RECEIVING WATER(S) BEING INCREASED BY MORE THAN TEN (10) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS CLASSIFIED AS TROUT STREAMS OR MORE THAN TWENTY-FIVE (25) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS SUPPORTING WARM WATER FISHERIES, REGARDLESS OF A PERMITTEE'S CERTIFICATION UNDER PART II.B.1.j. AND PART II.B.3.j.

AUTHORIZED DISCHARGES (PART I.C):

1. ALL DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE ACRE. PART I.C.1.a.
2. ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORMWATER EXCEPT AS PROVIDED IN PART I.C.2 AND PART III.A.2 OF THE PERMIT.
3. AUTHORIZED MIXED STORM DISCHARGES: PART I.C.2
   A. THE INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY AND IS AN INTEGRAL PART OF THE CONSTRUCTION ACTIVITY;
   B. THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES ARE OCCURRING ARE IN COMPLIANCE WITH THE TERMS OF THE PERMIT;
   C. STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION ARE OCCURRING ARE COVERED BY A DIFFERENT NPDES GENERAL PERMIT OR INDIVIDUAL PERMIT AUTHORIZING SUCH DISCHARGES AND THE DISCHARGES ARE IN COMPLIANCE WITH A DIFFERENT NPDES PERMIT.
4. THE FOLLOWING NON-STORMWATER DISCHARGES MAY BE AUTHORIZED BY THE PERMIT PROVIDED THE NON-STORMWATER COMPONENT OF THE DISCHARGE IS EXPLICITLY IN THE PLAN AND IS IN COMPLIANCE WITH PART IV.D.7: PART III.A.2.
   A. FIRE FIGHTING ACTIVITIES;
   B. FIRE HYDRANT FLUSHING;
   C. POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING;
   D. IRRIGATION DRAINING;
   E. AIR CONDITIONING CONDENSATE;
   F. SPRINGS;
   G. UNCONTAMINATED GROUND WATER; AND
   H. FOUNDATION OR FOOTING DRAINS WHERE THE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS.

LIMITATIONS ON COVERAGE PART I.C.3
THE FOLLOWING STORMWATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:

   A. STORMWATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY THAT ORIGINATE FROM THE SITE AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION;
   B. DISCHARGES THAT ARE MIXED WITH SOURCES OF NON-STORMWATER OTHER THAN DISCHARGES WHICH ARE IDENTIFIED IN PART III.A.2. OF THIS PERMIT AND WHICH ARE IN COMPLIANCE WITH PART IV.D.7. (NON-STORMWATER DISCHARGES) OF THIS PERMIT;
   C. STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT. SUCH DISCHARGES MAY BE AUTHORIZED UNDER THIS PERMIT AFTER AN EXISTING PERMIT EXPIRES PROVIDED THE EXISTING PERMIT DID NOT ESTABLISH NUMERIC LIMITATIONS FOR SUCH DISCHARGES; AND
   D. STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT THE DIRECTOR (EPD) HAS DETERMINED TO BE OR MAY REASONABLY BE EXPECTED TO BE CONTRIBUTING TO A VIOLATION OF A WATER QUALITY STANDARD.

COMPLIANCE WITH WATER QUALITY PART I.C.4
NO DISCHARGES A