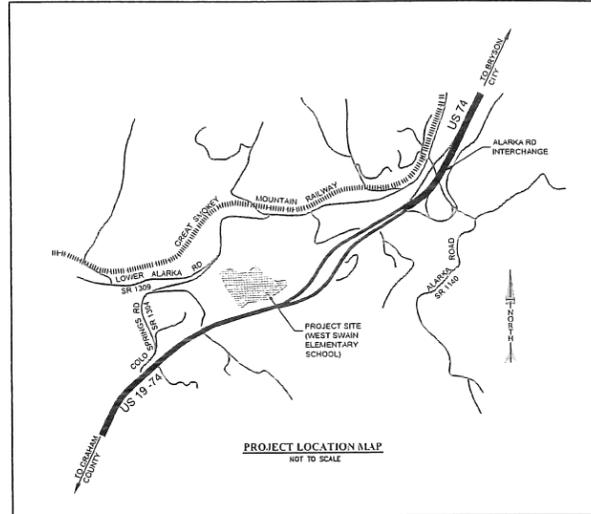


GENERAL REQUIREMENTS:

1. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE NCDOT "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" LATEST EDITION AND THE "NO EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL" EXCEPT AS MODIFIED BY THESE PLANS OR THE RELATED PROJECT MANUAL AND NO DOCUMENTS FOR THIS PROJECT.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "NO ONE CALL" AND ALL NONMEMBER UTILITY OWNERS IN THE PROJECT AREA AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY. ALL EXISTING UTILITIES ARE NOT SHOWN ON THESE PLANS AND THE LOCATIONS OF UTILITIES SHOWN MAY HAVE BEEN ESTIMATED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS OF ALL EXISTING UTILITIES AND PROTECT ALL EXISTING UTILITIES AND STRUCTURES FROM DAMAGE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THESE PLANS, INCORRECTLY SHOWN ON THESE PLANS OR NOT SHOWN ON THESE PLANS, SHALL BE REPAIRED BY THE CONTRACTOR, AT HIS EXPENSE, TO THE SATISFACTION OF THE UTILITY OWNER.
3. THE CONTRACTOR SHALL PERFORM ALL WORK IN A LOGICAL CONSTRUCTION SEQUENCE AS REQUIRED TO STREAMLINE AND EXPEDITE THE COMPLETION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION & SCHEDULING WITH OTHER CONTRACTORS, SUBCONTRACTORS, TRADESMEN, UTILITIES AND ALL OTHER PARTIES WORKING WITHIN THE PROJECT AREA AS NEEDED TO EXPEDITE AND SUCCESSFULLY COMPLETE THE PROJECT. THE CONTRACTOR SHALL ALLOW TIME FOR COORDINATION AND DELAYS CAUSED BY OTHERS WORKING WITHIN AND USING THE PROJECT AREA.
4. THE CONTRACTOR IS RESPONSIBLE FOR STAKING OUT ALL WORK RELATED TO THIS PROJECT AND VERIFYING ALL DIMENSIONS AND GRADES PRIOR TO COMMENCING CONSTRUCTION. ALL STAKEOUT WORK SHALL BE PERFORMED BY A QUALIFIED NC PROFESSIONAL LAND SURVEYOR ENGAGED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. SHOULD ANY CONFLICTS OR OTHER PROBLEMS EXIST, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT AND CIVIL ENGINEER AND AWAIT FURTHER INSTRUCTION PRIOR TO COMMENCING CONSTRUCTION ON THE PROJECT. ANY DIMENSIONS OR LENGTHS SHOWN OR INDICATED ON THE PLANS ARE HORIZONTAL MEASUREMENTS AND PARALLEL OR PERPENDICULAR TO CENTERLINES, PAVEMENT EDGES, CURB LINES OR BASE LINES UNLESS SPECIFICALLY NOTED OTHERWISE.
5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEMOLITION, CLEARING, GRUBBING AND DISPOSAL OF ALL WASTE MATERIALS AS NECESSARY TO SATISFACTORILY COMPLETE ALL CONSTRUCTION WHETHER SHOWN ON THE PLANS, NOT SHOWN ON THE PLANS OR INCORRECTLY SHOWN ON THESE PLANS. ALL WASTE MATERIALS SHALL BE REMOVED AND DISPOSED OFF THE PROJECT PROPERTY BY THE CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS AT THE CONTRACTOR'S EXPENSE. THE OWNER, AT THEIR DISCRETION, MAY SELECT TO RETAIN OWNERSHIP OF ANY MATERIALS REMOVED, IN WHICH CASE, THE CONTRACTOR SHALL MAKE EVERY EFFORT TO REMOVE THE MATERIAL WITHOUT DAMAGE.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ACCEPTABLE ACCESS TO ALL PARTIES THROUGHOUT THE PROJECT AREA AND OTHER AFFECTED PROPERTIES THROUGHOUT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, STUDENTS AND FACULTY, UTILITY COMPANIES AND OTHER CONTRACTORS ASSOCIATED WITH THE PROJECT AREA. THE CONTRACTOR SHALL PROVIDE AND INSTALL MAINTENANCE STONE, TEMPORARY WALKWAYS AND OTHER MEASURES AS MAY BE NECESSARY TO MAINTAIN PEDESTRIAN AND VEHICLE ACCESS IN A CONDITION ACCEPTABLE TO THE SCHOOL, ENGINEER, NCDOT, OTHER CONTRACTORS AND ANY OTHER PARTIES AFFECTED BY CONSTRUCTION ACTIVITIES.
7. SHOULD GROUNDWATER BE ENCOUNTERED DURING CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN AN ADEQUATE DEWATERING SYSTEM. DEWATERING EQUIPMENT SHALL BE USED IN A MANNER WHICH PREVENTS DAMAGE TO ANY PUBLIC OR PRIVATE PROPERTIES.
8. THESE PLANS HAVE BEEN DEVELOPED UTILIZING ELEVATION AND LOCATION SURVEYS BY MERRON LAND SURVEYING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL ACTUAL SITE CONDITIONS AND NOTIFY THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION. SURVEY INFORMATION SHOWN ON THESE PLANS SHOULD NOT BE USED FOR THE SALE OR CONVEYANCE OF LAND OR RIGHT OF WAY.
9. CONSTRUCTION SIGNING AND TRAFFIC CONTROL ARE THE CONTRACTOR'S SOLE RESPONSIBILITY. ALL CONSTRUCTION SIGNING AND TRAFFIC CONTROL MATERIALS, METHODS AND MEANS SHALL BE IN ACCORDANCE WITH NCDOT STANDARDS, THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND ANY PROJECT SPECIFIC REQUIREMENTS IMPOSED BY THE OWNER AND THE LOCAL NCDOT OFFICES.
10. THESE PLANS REPRESENT MINIMUM RECOMMENDED MEASURES FOR EROSION CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING ADDITIONAL MEASURES IF NECESSARY TO PREVENT THE LOSS OF SEDIMENTATION.
11. GROUND COVER (TEMPORARY SEEDING OR GRAVEL SURFACE) SHOULD BE ESTABLISHED IN 7 WORKING DAYS OR 10 CALENDAR DAYS, WHICHEVER IS SHORTER.
12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SECURITY AND SAFETY RELATED TO THIS PROJECT.
13. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL PUBLIC AND PRIVATE PROPERTIES FROM DAMAGE RELATED TO CONSTRUCTION ACTIVITIES. ANY DAMAGE AS A RESULT OF CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER, NCDOT AND SWAIN COUNTY SCHOOLS.
14. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AN ACCURATE SET OF AS-BUILT DRAWINGS FOR ALL PORTIONS OF THE SITE AFFECTED BY CONSTRUCTION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AN ACCURATE AS-BUILT SURVEY, COMPLETED BY A QUALIFIED NC PROFESSIONAL LAND SURVEYOR, AT THE CONTRACTOR'S EXPENSE. THE SURVEY SHALL BE PROVIDED IN BOTH SEALED HARD COPY AND DIGITAL (MICRO COMPATIBLE WITH ALL RAW SURVEY DATA POINTS) FORMATS. THE AS-BUILT SURVEY SHALL INCLUDE ALL AREAS AFFECTED BY CONSTRUCTION AND SHALL BE PREPARED ON PLAN HORIZONTAL AND VERTICAL DATUMS PROVIDED AND SHALL PROVIDE 1 FT VERTICAL CONTOUR INTERVALS. ALL CRITICAL ELEVATIONS, ALL GRADE CHANGES, ALL LOCATIONS AND ELEVATIONS OF ALL PAVEMENTS, SIDEWALKS, CURB AND GUTTER WALLS, ALL STORM PIPE AND STRUCTURE LOCATIONS, ALL STORM STRUCTURE COVERGATE AND INVERT ELEVATIONS, ALL SEWER LOCATIONS AND ELEVATIONS, ALL WATER LINES, WATER VALVES AND WATER APPURTENANCES LOCATIONS, COMMUNICATION CABLES, ALL KNOWN UTILITY LOCATIONS AND ELEVATIONS, AND ANY OTHER MANMADE IMPROVEMENTS (WHETHER EXISTING PRIOR TO OR FOLLOWING THE CONSTRUCTION OF THIS PROJECT). THE SURVEY SHALL INCLUDE ALL PORTIONS WITHIN THE PROJECT AREA LIMITS. THE AS-BUILT SURVEY SHALL BE PROVIDED TO THE ENGINEER AND SHALL BE ACCEPTABLE TO THE ENGINEER PRIOR TO RELEASE OF FINAL PAYMENT.
15. THE CONTRACTOR SHALL, AT THEIR EXPENSE, FURNISH ALL FILL, SELECT BACKFILL, BORROW, SPECIAL BEDDING AND OTHER MATERIALS AND DISPOSE OF ALL WASTE AND EXCESS MATERIALS OFF-SITE AS NECESSARY FOR THE PROPER COMPLETION OF THE PROJECT TO THE SATISFACTION OF THE ARCHITECT.
16. THE CONTRACTOR SHALL PROVIDE AND PLACE AS THE FINAL 4" THICK SURFACE OF TOPSOIL ON ANY DISTURBED AREAS HAVING SLOPES OF 25% AND LESS (WITH THE EXCEPTION OF PROPOSED BUILDING LOCATIONS). TOPSOIL SHALL BE WELL BLENDED, RICH, NATURAL, ORGANIC TOPSOIL, FREE OF ROOTS, ROCKS AND OTHER DEBRIS. EXCESS TOPSOILS SHALL BE DISPOSED OFF THE OWNER'S PROPERTY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
17. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AND PREVENTING PROBLEMS DUE TO DUST OR MUD TO THE SATISFACTION OF THE SWAIN COUNTY SCHOOLS, THE ENGINEER, NCDOT AND OTHERS.
18. THE CONTRACTOR SHALL FINE GRADE, RAKE AND REMOVE ALL STONES AND OTHER OBJECTIONABLE MATERIALS FROM THE FINISHED GROUND SURFACES PRIOR TO SEEDING TO THE SATISFACTION OF THE ENGINEER, NCDOT AND SWAIN COUNTY SCHOOLS.
19. ALL CUT EARTH SLOPES SHALL BE 2:0 HORIZONTAL TO 1 VERTICAL OR FLATTER UNLESS RECOMMENDED BY THE OWNER'S GEOTECHNICAL ENGINEER. THE OWNER IS RESPONSIBLE FOR ENGAGING THE SERVICES OF A QUALIFIED NC PROFESSIONAL GEOTECHNICAL ENGINEER TO MAKE RECOMMENDATIONS AND MONITOR CONSTRUCTION. ALL EARTHWORK SHALL BE IN ACCORDANCE WITH ANY RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEER MADE PRIOR TO AND DURING CONSTRUCTION.
20. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING ALL CONSTRUCTION ACTIVITIES TO AREAS WITHIN THE LIMITS OF CONSTRUCTION INDICATED, THE OWNER'S PROPERTY AND APPLICABLE RIGHT-OF-WAYS. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE USE OF OFF-SITE STORAGE AND STAGING AREA(S) AS NECESSARY TO COMPLETE THE PROJECT AT THEIR EXPENSE.
21. WHERE NECESSARY TO PREVENT EXTENDED UTILITIES OUTAGES, TO EXISTING CUSTOMERS, THE CONTRACTOR SHALL, AT HIS EXPENSE, INSTALL, PROTECT AND MAINTAIN TEMPORARY UTILITIES SERVICES USING APPROVED MATERIALS AND METHODS AS REQUIRED TO MINIMIZE OUTAGES TO THE SATISFACTION OF THE ENGINEER.
22. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND COORDINATING ALL SITE VISITS BY THE ENGINEER AT STAGES OF CONSTRUCTION SPECIFIED BY THE ENGINEER. THIS MAY REQUIRE THAT TRENCHES REMAIN OPEN FOR A PERIOD OF TIME UNTIL SUCH SITE VISITATION IS CONDUCTED. SECURITY AND SAFETY OF OPEN TRENCHES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
23. THE CONTRACTOR SHALL INCLUDE IN THEIR BID, ADEQUATE ALLOWANCES FOR SECURING ALL CONSTRUCTION AREAS FROM UNAUTHORIZED ACCESS USING TEMPORARY CHAIN LINE FENCING, BARRICADES, BARRIERS OR OTHER SUITABLE METHODS TO INSURE A SECURE AND SAFE JOBSITE. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION RELATED SECURITY AND SAFETY.
24. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL ALL SEWER AND APPURTENANCES IN STRICT ACCORDANCE WITH NCDOT STANDARDS, NCDOT REGULATIONS, NAWA STANDARDS, TOWN OF BRYSON CITY STANDARDS AND ALL OTHER APPLICABLE LOCAL, STATE AND NATIONAL REGULATIONS AND STANDARDS. WHERE STANDARDS OR REGULATIONS CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL BE ADHERED TO AS INTERPRETED BY THE ENGINEER.
25. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING THE USE OF ANY REPLACED SEWER COMPONENTS UNTIL ALL TESTING AND IDENTIFICATION IS SUCCESSFULLY COMPLETED AND THE ENGINEER HAS APPROVED THE USE OF THE SEWER COMPONENTS.
26. WATER MAINS AND SEWER LINES SHALL BE SEPARATED BY A MINIMUM OF 10 HORIZONTAL FEET AT ALL LOCATIONS, WHERE IT IS ABSOLUTELY NECESSARY FOR A WATER AND SEWER LINE TO CROSS, THE SEWER LINE SHALL BE INSTALLED BELOW THE WATER LINE WITH A MINIMUM 18 INCHES OF VERTICAL CLEARANCE BETWEEN THE TOP OF THE SEWER PIPE AND THE BOTTOM OF THE WATER LINE WHILE MAINTAINING 3 FT. OF COVER ON THE WATERLINE.
27. ALL SEWER LINES AND STORM DRAINS OR OTHER UTILITIES SHALL BE SEPARATED BY A MINIMUM CLEAR VERTICAL SPACE OF 2 FT.
28. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PREVENT EARTH, ROCK, DEBRIS, GROUNDWATER OR OTHER CONTAMINANTS FROM ENTERING PIPING AND UTILITIES DURING CONSTRUCTION. INSTALL A TEMPORARY, WATERTIGHT PLUG AT THE END OF EACH WORKDAY.
29. ALL SEWER FORCE MAIN PIPE, VALVES, FITTINGS AND APPURTENANCES SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 200 PSI. ALL JOINTS AND FITTINGS SHALL BE ADEQUATELY RESTRAINED FOR A 200 PSI WORKING PRESSURE PLUS A 100 PSI ALLOWANCE FOR WATER HAMMER.
30. MINIMUM EARTH COVER OVER ALL SEWER LINES SHALL BE 3 VERTICAL FEET UNLESS SPECIFICALLY NOTED OTHERWISE. MINIMUM EARTH COVER ON ALL STORM SEWERS SHALL BE 2 VERTICAL FEET UNLESS SPECIFICALLY NOTED OTHERWISE.

**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SWAIN COUNTY
LOCATION: US 74 AT WEST SWAIN ELEMENTARY SCHOOL
TYPE OF WORK: GRADING, DRAINAGE & PAVING**



STATE	STATE PROJECT REFERENCE NO.		
N. C.			
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
43657		CONST.	

CIVIL SITE PLAN INDEX

SHEET #	SHEET NAME
C1.0	GENERAL INFORMATION
C2.0	EXISTING SITE & DEMOLITION PLAN
C3.0	EROSION CONTROL PLAN
C4.0	SITE GEOMETRY AND PAVING PLAN
C5.0	GRADING AND DRAINAGE PLAN & CENTERLINE PROFILE
C6.0	EROSION CONTROL, STORM DRAINAGE & PAVEMENT DETAILS
C7.0	MISCELLANEOUS DETAILS



CAUTION: EXISTING BURIED GAS, TELEPHONE, WATER, STORM, SEWER, ELECTRIC, COMMUNICATION INCLUDING FIBER OPTIC AND OTHER UTILITIES ARE LOCATED THROUGHOUT THE PROJECT AREA. ALL EXISTING UTILITIES ARE NOT SHOWN ON THE PLANS AND THOSE SHOWN ARE NOT NECESSARILY SHOWN IN CORRECT LOCATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATIONS OF ALL UTILITIES AND PROTECT THEM FROM DAMAGE THROUGHOUT CONSTRUCTION.

FINAL DRAWING- FOR REVIEW PURPOSES ONLY

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Lofquist & Associates, Inc.
PLANNING ENGINEERING DESIGN
11000 Highway 101, Suite 100, Raleigh, NC 27617
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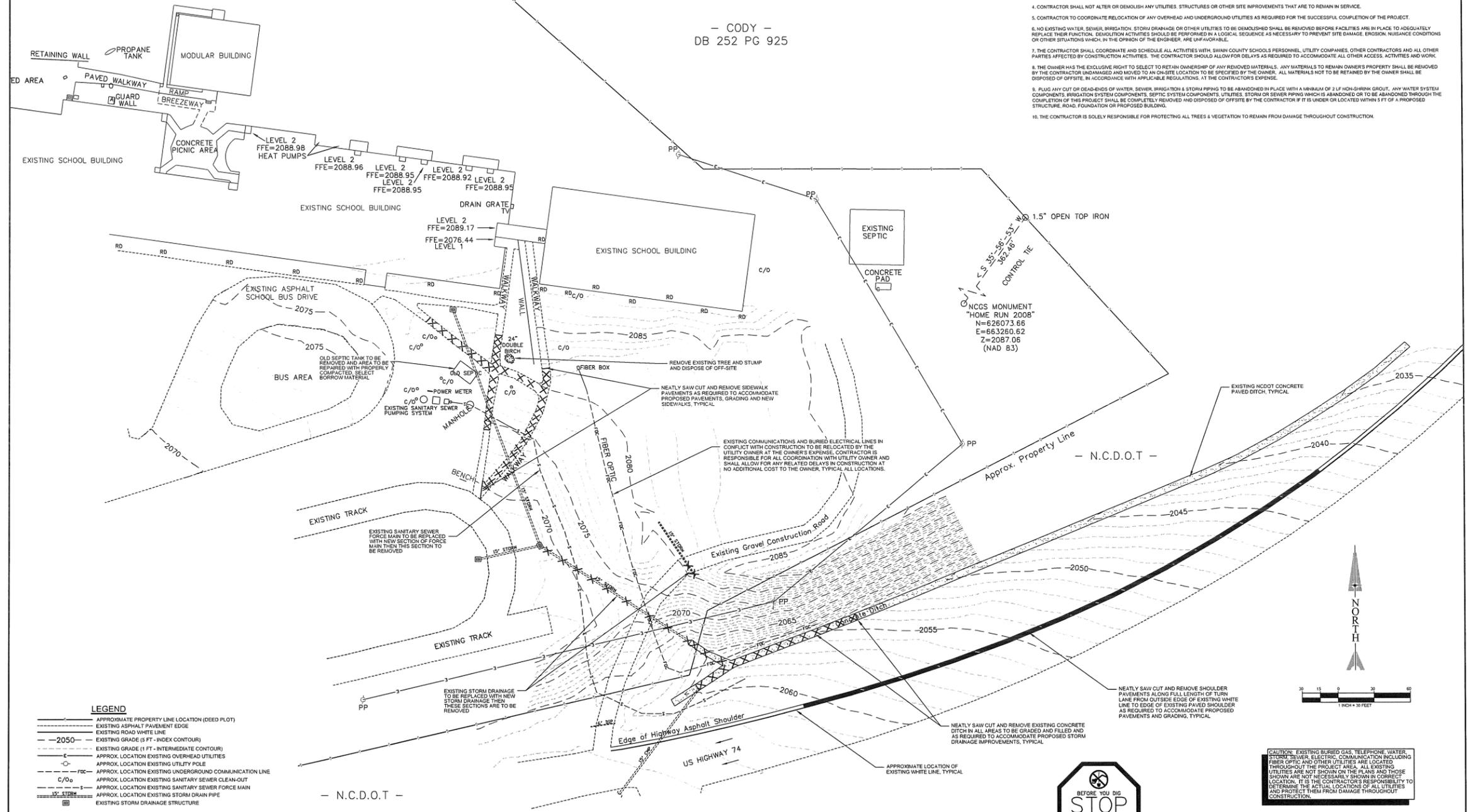
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Project No: 120551 Plot Date: 4/18/23 Scale: AS NOTED

GENERAL INFORMATION

**WEST SWAIN ELEMENTARY SCHOOL
PROPOSED BUS ACCESS DRIVE**
Swain County Board of Education
SWAIN COUNTY, NORTH CAROLINA

SHEET NUMBER
C1.0

- NOTES**
- EXISTING SITE TOPOGRAPHY, LOCATION SURVEYS AND BOUNDARY DEED PLOTS BY HERRON LAND SURVEYING. THE PROPERTY LINE INFORMATION SHOWN ON THIS PLAN REPRESENTS DEED PLOTS AND SHALL NOT BE USED IN ANY WAY FOR THE SALE OR CONVEYANCE OF LAND OR RIGHT-OF-WAYS.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXISTING SITE CONDITIONS AND ALL SITE MEASUREMENTS, INCLUDING THE LOCATIONS AND DEPTHS OF UTILITIES AND DRAINAGE, PRIOR TO CONSTRUCTION AND TO NOTIFY THE ENGINEER OF ANY AMBIGUITIES OR CONFLICTS.
 - THIS PLAN IS NOT INTENDED TO SHOW ALL ITEMS TO BE DEMOLISHED AND REMOVED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLISHING, REMOVING AND DISPOSING OF OFF-SITE ANY ITEMS NECESSARY, WHETHER SHOWN ON THESE PLANS, NOT SHOWN ON THESE PLANS OR INCORRECTLY SHOWN ON THESE PLANS. TO ACCOMMODATE THE CONSTRUCTION OF THIS PROJECT AT THE CONTRACTOR'S EXPENSE. ALL TREES, VEGETATION, STRUCTURES, UTILITIES AND OTHER EXISTING ABOVE GROUND AND UNDERGROUND SITE FEATURES ARE NOT SHOWN ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE TO CONDUCT THE NECESSARY INVESTIGATIONS AND INCLUDE ALL CLEARING, GRUBBING, DEMOLITION AND DISPOSAL IN THEIR BID NECESSARY FOR THE PROPER COMPLETION OF THE PROJECT.
 - CONTRACTOR SHALL NOT ALTER OR DEMOLISH ANY UTILITIES, STRUCTURES OR OTHER SITE IMPROVEMENTS THAT ARE TO REMAIN IN SERVICE.
 - CONTRACTOR TO COORDINATE RELOCATION OF ANY OVERHEAD AND UNDERGROUND UTILITIES AS REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE PROJECT.
 - NO EXISTING WATER, SEWER, IRRIGATION, STORM DRAINAGE OR OTHER UTILITIES TO BE DEMOLISHED SHALL BE REMOVED BEFORE FACILITIES ARE IN PLACE TO ADEQUATELY REPLACE THEIR FUNCTION. DEMOLITION ACTIVITIES SHOULD BE PERFORMED IN A LOGICAL SEQUENCE AS NECESSARY TO PREVENT SITE DAMAGE, EROSION, AVIATION CONDITIONS OR OTHER SITUATIONS WHICH, IN THE OPINION OF THE ENGINEER, ARE UNFAVORABLE.
 - THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL ACTIVITIES WITH SWAIN COUNTY SCHOOLS PERSONNEL, UTILITY COMPANIES, OTHER CONTRACTORS AND ALL OTHER PARTIES AFFECTED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHOULD ALLOW FOR DELAYS AS REQUIRED TO ACCOMMODATE ALL OTHER ACCESS, ACTIVITIES AND WORK.
 - THE OWNER HAS THE EXCLUSIVE RIGHT TO SELECT TO RETAIN OWNERSHIP OF ANY REMOVED MATERIALS. ANY MATERIALS TO REMAIN OWNER'S PROPERTY SHALL BE REMOVED BY THE CONTRACTOR UNDAMAGED AND MOVED TO AN ON-SITE LOCATION TO BE SPECIFIED BY THE OWNER. ALL MATERIALS NOT TO BE RETAINED BY THE OWNER SHALL BE DISPOSED OF OFF-SITE, IN ACCORDANCE WITH APPLICABLE REGULATIONS, AT THE CONTRACTOR'S EXPENSE.
 - PLUG ANY CUT OR DEAD-ENDS OF WATER, SEWER, IRRIGATION & STORM PIPING TO BE ABANDONED IN PLACE WITH A MINIMUM OF 2 LF NON-SHRINK GROUT. ANY WATER SYSTEM COMPONENTS, IRRIGATION SYSTEM COMPONENTS, SEPTIC SYSTEM COMPONENTS, UTILITIES, STORM OR SEWER PIPING WHICH IS ABANDONED OR TO BE ABANDONED THROUGHOUT THE COMPLETION OF THIS PROJECT SHALL BE COMPLETELY REMOVED AND DISPOSED OF OFF-SITE BY THE CONTRACTOR IF IT IS UNDER OR LOCATED WITHIN 5 FT OF A PROPOSED STRUCTURE, ROAD, FOUNDATION OR PROPOSED BUILDING.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTING ALL TREES & VEGETATION TO REMAIN FROM DAMAGE THROUGHOUT CONSTRUCTION.



LEGEND

---	APPROXIMATE PROPERTY LINE LOCATION (DEED PLOT)
---	EXISTING ASPHALT PAVEMENT EDGE
---	EXISTING ROAD WHITE LINE
-2050-	EXISTING GRADE (5 FT - INDEX CONTOUR)
- - -	EXISTING GRADE (1 FT - INTERMEDIATE CONTOUR)
-○-	APPROX. LOCATION EXISTING OVERHEAD UTILITIES
-○-	APPROX. LOCATION EXISTING UTILITY POLE
-○-	APPROX. LOCATION EXISTING UNDERGROUND COMMUNICATION LINE
-○-	APPROX. LOCATION EXISTING SANITARY SEWER CLEAN-OUT
-○-	APPROX. LOCATION EXISTING SANITARY SEWER FORCE MAIN
-○-	APPROX. LOCATION EXISTING STORM DRAIN PIPE
-○-	EXISTING STORM DRAINAGE STRUCTURE

CAUTION: EXISTING BURIED GAS, TELEPHONE, WATER, STORM, SEWER, ELECTRIC, COMMUNICATION INCLUDING FIBER OPTIC AND OTHER UTILITIES ARE LOCATED THROUGHOUT THE PROJECT AREA. ALL EXISTING UTILITIES ARE NOT SHOWN ON THESE PLANS AND THOSE SHOWN ARE NOT NECESSARILY SHOWN IN CORRECT LOCATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATIONS OF ALL UTILITIES AND PROTECT THEM FROM DAMAGE THROUGHOUT CONSTRUCTION.



FINAL DRAWING - FOR REVIEW PURPOSES ONLY

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 Project No: 1206501 Plot Date: 4/15/13 Scale: AS NOTED

EXISTING SITE & DEMOLITION PLAN

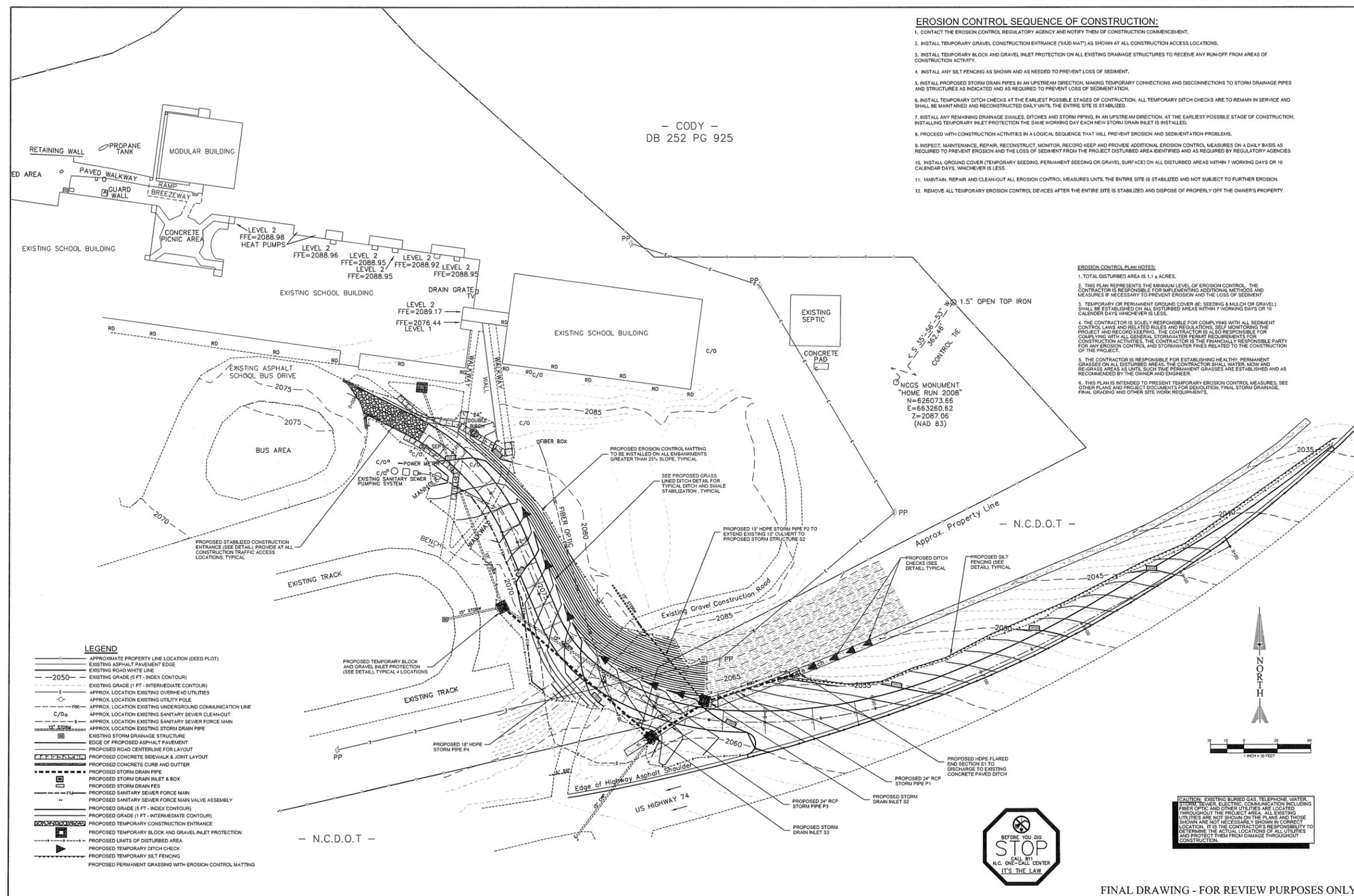
**WEST SWAIN ELEMENTARY SCHOOL
 PROPOSED BUS ACCESS DRIVE**
 Swain County Board of Education
 SWAIN COUNTY, NORTH CAROLINA

SHEET NUMBER
C2.0

- CODY -
DB 252 PG 925

- EROSION CONTROL SEQUENCE OF CONSTRUCTION:**
1. CONTACT THE EROSION CONTROL REGULATORY AGENCY AND NOTIFY THEM OF CONSTRUCTION COMMENCEMENT.
 2. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE (MUD MAT) AS SHOWN AT ALL CONSTRUCTION ACCESS LOCATIONS.
 3. INSTALL TEMPORARY BLOCK AND GRAVEL INLET PROTECTION ON ALL EXISTING DRAINAGE STRUCTURES TO RECEIVE ANY RUN-OFF FROM AREAS OF CONSTRUCTION ACTIVITY.
 4. INSTALL ANY SILT FENCING AS SHOWN AND AS NEEDED TO PREVENT LOSS OF SEDIMENT.
 5. INSTALL PROPOSED STORM DRAIN PIPES IN AN UPSTREAM DIRECTION, MAKING TEMPORARY CONNECTIONS AND DISCONNECTIONS TO STORM DRAINAGE PIPES AND STRUCTURES AS INDICATED AND AS REQUIRED TO PREVENT LOSS OF SEDIMENTATION.
 6. INSTALL TEMPORARY DITCH CHECKS AT THE EARLIEST POSSIBLE STAGES OF CONSTRUCTION. ALL TEMPORARY DITCH CHECKS ARE TO REMAIN IN SERVICE AND SHALL BE MAINTAINED AND RECONSTRUCTED DAILY UNTIL THE ENTIRE SITE IS STABILIZED.
 7. INSTALL ANY REMAINING DRAINAGE SWALES, DITCHES AND STORM PIPING, IN AN UPSTREAM DIRECTION, AT THE EARLIEST POSSIBLE STAGE OF CONSTRUCTION, INSTALLING TEMPORARY INLET PROTECTION THE SAME WORKING DAY EACH NEW STORM DRAIN INLET IS INSTALLED.
 8. PROCEED WITH CONSTRUCTION ACTIVITIES IN A LOGICAL SEQUENCE THAT WILL PREVENT EROSION AND SEDIMENTATION PROBLEMS.
 9. INSPECT, MAINTAIN, REPAIR, RECONSTRUCT, MONITOR, RECORD KEEP AND PROVIDE ADDITIONAL EROSION CONTROL MEASURES ON A DAILY BASIS AS REQUIRED TO PREVENT EROSION AND THE LOSS OF SEDIMENT FROM THE PROJECT DISTURBED AREA IDENTIFIED AND AS REQUIRED BY REGULATORY AGENCIES.
 10. INSTALL GROUND COVER (TEMPORARY SEEDING, PERMANENT SEEDING OR GRAVEL SURFACE) ON ALL DISTURBED AREAS WITHIN 7 WORKING DAYS OR 10 CALENDAR DAYS, WHICHEVER IS LESS.
 11. MAINTAIN, REPAIR AND CLEAR-OUT ALL EROSION CONTROL MEASURES UNTIL THE ENTIRE SITE IS STABILIZED AND NOT SUBJECT TO FURTHER EROSION.
 12. REMOVE ALL TEMPORARY EROSION CONTROL DEVICES AFTER THE ENTIRE SITE IS STABILIZED AND DISPOSE OF PROPERLY OFF THE OWNER'S PROPERTY.

- EROSION CONTROL PLAN NOTES:**
1. TOTAL DISTURBED AREA IS 1.1 ± ACRES.
 2. THIS PLAN REPRESENTS THE MINIMAL LEVEL OF EROSION CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ADDITIONAL METHODS AND MEASURES IF NECESSARY TO PREVENT EROSION AND THE LOSS OF SEDIMENT.
 3. TEMPORARY OR PERMANENT GROUND COVER (E. SEEDING & MULCH OR GRAVEL) SHALL BE ESTABLISHED ON ALL DISTURBED AREAS WITHIN 7 WORKING DAYS OR 10 CALENDAR DAYS WHICHEVER IS LESS.
 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH ALL SEDIMENT CONTROL LAWS AND REGULATORY RULES AND REGULATIONS. SELF MONITORING THE PROJECT AND RECORD KEEPING. THE CONTRACTOR IS ALSO RESPONSIBLE FOR COMPLYING WITH ALL GENERAL STORMWATER PERMIT REQUIREMENTS. THE PARTY CONSTRUCTION ACTIVITIES, THE CONTRACTOR IS THE FINANCIALLY RESPONSIBLE PARTY FOR ANY EROSION CONTROL AND STORMWATER FINES RELATED TO THE CONSTRUCTION OF THE PROJECT.
 5. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING HEALTHY, PERMANENT GRASSES ON ALL DISTURBED AREAS. THE CONTRACTOR SHALL WATER, MOW AND REGRASS AREAS AS UNTIL SUCH TIME PERMANENT GRASSES ARE ESTABLISHED AND AS RECOMMENDED BY THE OWNER AND ENGINEER.
 6. THIS PLAN IS INTENDED TO PRESENT TEMPORARY EROSION CONTROL MEASURES. SEE OTHER PLANS AND PROJECT DOCUMENTS FOR DEMOLITION, FINAL STORM DRAINAGE, FINAL GRADING AND OTHER SITE WORK REQUIREMENTS.



- LEGEND**
- APPROXIMATE PROPERTY LINE LOCATION (DEED PLOT)
 - EXISTING ASPHALT PAVEMENT EDGE
 - EXISTING ROAD WHITE LINE
 - - - 2050 - - - EXISTING GRADE (5 FT - INDEX CONTOUR)
 - - - EXISTING GRADE (1 FT - INTERMEDIATE CONTOUR)
 - APPROX. LOCATION EXISTING OVERHEAD UTILITIES
 - APPROX. LOCATION EXISTING UTILITY POLE
 - - - 700 - - - APPROX. LOCATION EXISTING UNDERGROUND COMMUNICATION LINE
 - - - C/O - - - APPROX. LOCATION EXISTING SANITARY SEWER CLEAN-OUT
 - - - S - - - APPROX. LOCATION EXISTING SANITARY SEWER FORCE MAIN
 - - - 12" STORM - - - APPROX. LOCATION EXISTING STORM DRAIN PIPE
 - EXISTING STORM DRAINAGE STRUCTURE
 - EDGE OF PROPOSED ASPHALT PAVEMENT
 - PROPOSED ROAD CENTERLINE FOR LAYOUT
 - PROPOSED CONCRETE SIDEWALK & JOINT LAYOUT
 - PROPOSED CONCRETE CURB AND GUTTER
 - PROPOSED STORM DRAIN PIPE
 - PROPOSED STORM DRAIN FEES
 - FM - - - PROPOSED SANITARY SEWER FORCE MAIN
 - PROPOSED SANITARY SEWER FORCE MAIN VALVE ASSEMBLY
 - PROPOSED GRADE (5 FT - INDEX CONTOUR)
 - PROPOSED GRADE (1 FT - INTERMEDIATE CONTOUR)
 - PROPOSED TEMPORARY CONSTRUCTION ENTRANCE
 - PROPOSED TEMPORARY BLOCK AND GRAVEL INLET PROTECTION
 - PROPOSED LIMITS OF DISTURBED AREA
 - PROPOSED TEMPORARY DITCH CHECK
 - PROPOSED TEMPORARY SILT FENCING
 - PROPOSED PERMANENT GRASSING WITH EROSION CONTROL MATTING

REVISION NO.	DESCRIPTION	DATE	BY

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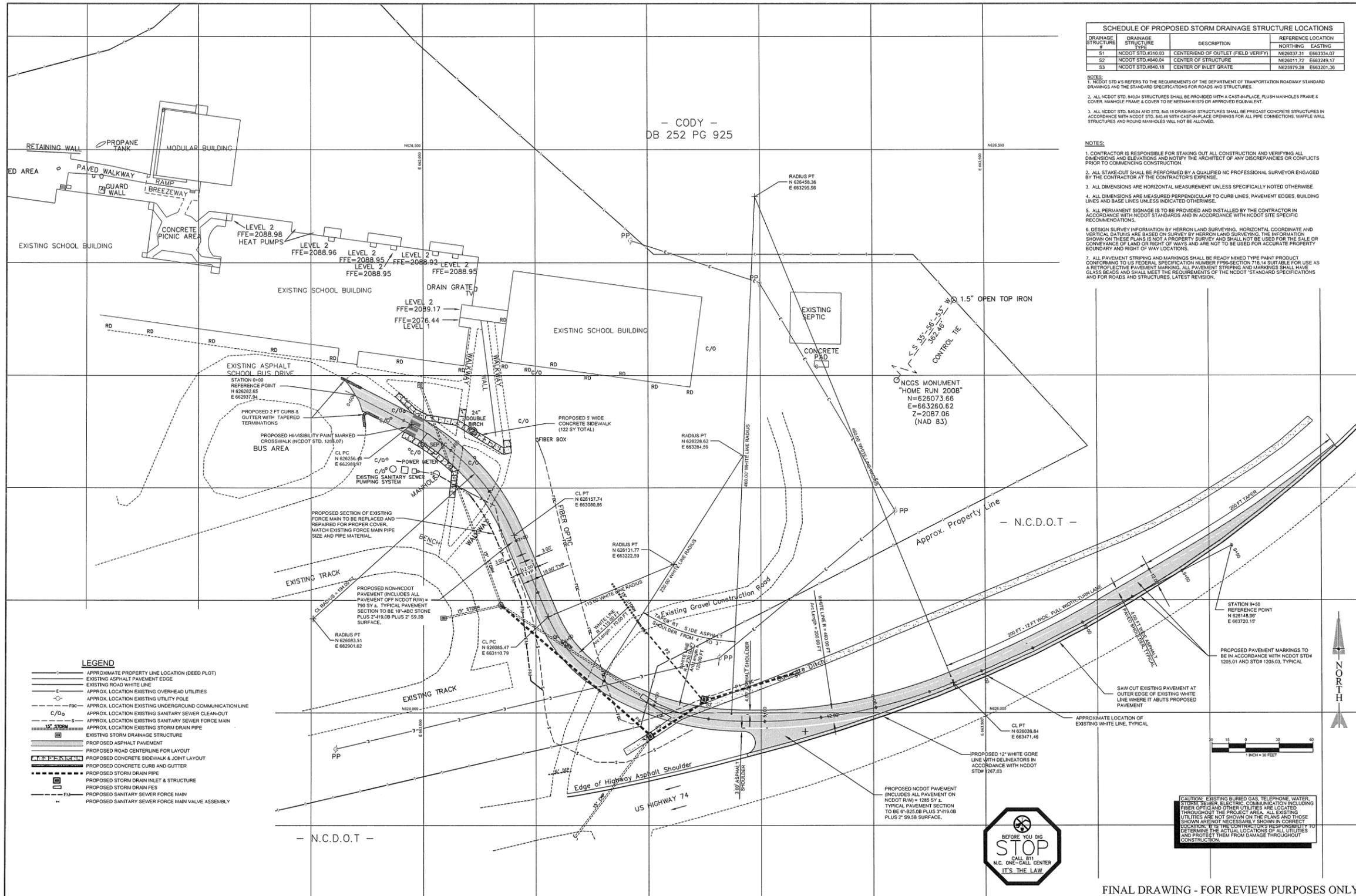
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Project No.: 1006501 Plot Date: 4/18/13 Scale: AS NOTED

EROSION CONTROL PLAN

**WEST SWAIN ELEMENTARY SCHOOL
PROPOSED BUS ACCESS DRIVE**
Swain County Board of Education
SWAIN COUNTY, NORTH CAROLINA

SHEET NUMBER
C3.0

FINAL DRAWING - FOR REVIEW PURPOSES ONLY



SCHEDULE OF PROPOSED STORM DRAINAGE STRUCTURE LOCATIONS			
DRAINAGE STRUCTURE #	DRAINAGE STRUCTURE TYPE	DESCRIPTION	REFERENCE LOCATION NORTHING EASTING
S1	NCDOT STD.#310.03	CENTER/END OF OUTLET (FIELD VERIFY)	N626037.31 E663334.07
S2	NCDOT STD.#840.04	CENTER OF STRUCTURE	N626011.72 E663248.17
S3	NCDOT STD.#840.18	CENTER OF INLET GRATE	N625978.28 E663201.36

- NOTES:**
- NCDOT STD #3 refers to the requirements of the DEPARTMENT OF TRANSPORTATION ROADWAY STANDARD DRAWINGS AND THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
 - ALL NCDOT STD. #840.04 STRUCTURES SHALL BE PROVIDED WITH A CAST-IN-PLACE, FLUSH MAN-HOLES FRAME & COVER, MANHOLE FRAME & COVER TO BE METAWAR159 OR APPROVED EQUIVALENT.
 - ALL NCDOT STD. #840.04 AND STD. #840.18 DRAINAGE STRUCTURES SHALL BE PRECAST CONCRETE STRUCTURES IN ACCORDANCE WITH NCDOT STD. #840.04 WITH CAST-IN-PLACE OPENINGS FOR ALL PIPE CONNECTIONS. WAFFLE WALL STRUCTURES AND ROUND MAN-HOLES WILL NOT BE ALLOWED.
- NOTES:**
- CONTRACTOR IS RESPONSIBLE FOR STAKING OUT ALL CONSTRUCTION AND VERIFYING ALL DIMENSIONS AND ELEVATIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO COMMENCING CONSTRUCTION.
 - ALL STAKE-OUT SHALL BE PERFORMED BY A QUALIFIED PROFESSIONAL SURVEYOR ENGAGED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
 - ALL DIMENSIONS ARE HORIZONTAL MEASUREMENT UNLESS SPECIFICALLY NOTED OTHERWISE.
 - ALL DIMENSIONS ARE MEASURED PERPENDICULAR TO CURB LINES, PAVEMENT EDGES, BUILDING LINES AND BASE LINES UNLESS INDICATED OTHERWISE.
 - ALL PERMANENT SIGNAGE IS TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH NCDOT STANDARDS AND IN ACCORDANCE WITH NCDOT SITE SPECIFIC RECOMMENDATIONS.
 - DESIGN SURVEY INFORMATION BY HERRON LAND SURVEYING, HORIZONTAL COORDINATE AND VERTICAL DATUMS ARE BASED ON SURVEY BY HERRON LAND SURVEYING. THE INFORMATION SHOWN ON THESE PLANS IS NOT A PROPERTY SURVEY AND SHALL NOT BE USED FOR THE SALE OR CONVEYANCE OF LAND OR RIGHT OF WAY AND ARE NOT TO BE USED FOR ACCURATE PROPERTY BOUNDARY AND RIGHT OF WAY LOCATIONS.
 - ALL PAVEMENT STRIPING AND MARKINGS SHALL BE READY MIXED TYPE PAINT PRODUCT CONFORMING TO US FEDERAL SPECIFICATION NUMBER FPM-SECTION 711.4 SUITABLE FOR USE AS A RETROREFLECTIVE PAVEMENT MARKING. ALL PAVEMENT STRIPING AND MARKINGS SHALL HAVE CLASS BEAMS AND SHALL MEET THE REQUIREMENTS OF THE NCDOT STANDARD SPECIFICATIONS AND FOR ROADS AND STRUCTURES, LATEST REVISION.

LEGEND

	APPROXIMATE PROPERTY LINE LOCATION (DEED PLOT)
	EXISTING ASPHALT PAVEMENT EDGE
	EXISTING ROAD WHITE LINE
	APPROX. LOCATION EXISTING UTILITY POLE
	APPROX. LOCATION EXISTING UNDERGROUND COMMUNICATION LINE
	APPROX. LOCATION EXISTING SANITARY SEWER FORCE MAIN
	APPROX. LOCATION EXISTING STORM DRAIN PIPE
	EXISTING STORM DRAINAGE STRUCTURE
	PROPOSED ASPHALT PAVEMENT
	PROPOSED ROAD CENTERLINE FOR LAYOUT
	PROPOSED CONCRETE SIDEWALK & JOINT LAYOUT
	PROPOSED CONCRETE CURB AND GUTTER
	PROPOSED STORM DRAIN PIPE
	PROPOSED STORM DRAIN INLET & STRUCTURE
	PROPOSED STORM DRAIN FRAMES
	PROPOSED SANITARY SEWER FORCE MAIN
	PROPOSED SANITARY SEWER FORCE MAIN VALVE ASSEMBLY

REVISION NO.	DESCRIPTION	DATE	BY

Lofquist & Associates, Inc.
 PLANNING ENGINEERING DESIGN
 1700 S. Main St. - Suite 302-3170 - Asheville, NC 28801-3946
 Professional Service Dedicated to Clients & Employees

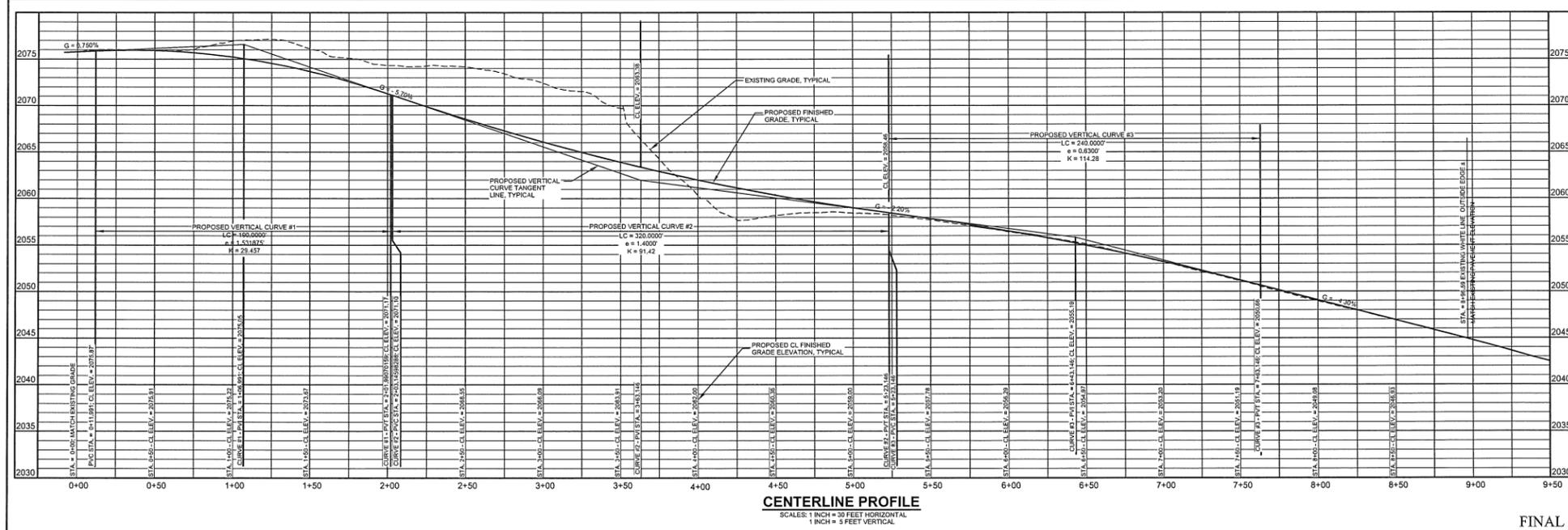
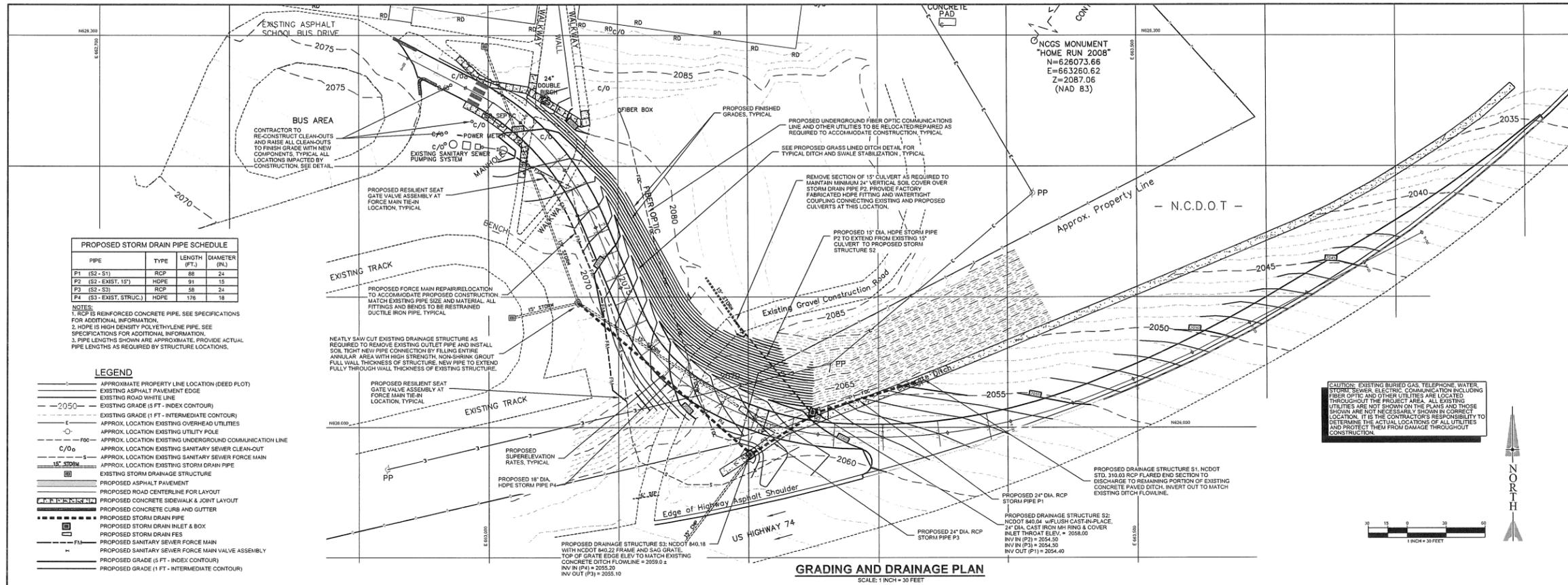
Drawn By: CAD Checked By: WVL File: A91.dwg
 Project No.: 1306541 Plot Date: 4/10/13 Scale: AS NOTED

SITE GEOMETRY & PAVING PLAN

WEST SWAIN ELEMENTARY SCHOOL
PROPOSED BUS ACCESS DRIVE
 Swain County Board of Education
 SWAIN COUNTY, NORTH CAROLINA

SHEET NUMBER
C4.0

FINAL DRAWING - FOR REVIEW PURPOSES ONLY



CAUTION: EXISTING BURIED GAS, TELEPHONE, WATER, STORM SEWER, ELECTRIC COMMUNICATION INCLUDING FIBER OPTIC AND OTHER UTILITIES ARE LOCATED THROUGHOUT THE PROJECT AREA. ALL EXISTING UTILITIES ARE NOT SHOWN ON THE PLANS AND THOSE LOCATIONS ARE NOT NECESSARILY SHOWN IN CORRECT LOCATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE ACTUAL LOCATIONS OF ALL UTILITIES AND PROTECT THEM FROM DAMAGE THROUGHOUT CONSTRUCTION.

STOP
BEFORE YOU DIG
CALL 811
N.C. ONE-CALL CENTER
IT'S THE LAW.

REVISION NO.	DESCRIPTION	DATE	BY

Lofquist & Associates, Inc.
PLANNING ENGINEERING DESIGN
1100 S. Orange Blvd., Suite 102-2079, Jacksonville, FL 32216-4610 Fax: 904.249.1100
Professional Service Dedicated to Clients & Employees

Drawn By: CAD Checked By: WJK File: ASD.dwg
Project No.: 1206501 Plot Date: 4/16/13 Scale: AS NOTED

GRADING AND DRAINAGE PLAN AND CENTERLINE PROFILE

**WEST SWAIN ELEMENTARY SCHOOL
PROPOSED BUS ACCESS DRIVE**
Swain County Board of Education
SWAIN COUNTY, NORTH CAROLINA

SHEET NUMBER
C5.0

PERMANENT SEEDING SCHEDULE 1
(For Slopes $\leq 3:1$, Avn. Soil, Low Maintenance)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
1. In Eastern Piedmont area 25 Business Days prior to 10th of May or common Bertram's Day. Use common Bertram's Day only when it is not a holiday.
2. After Aug. 15 use unseeded surface seed.
3. Where a seed approach is desired, seed before and substitute 40 lb/1000 ft² of Perennial Ryegrass.
4. To extend seeding season, seed from May 15 to 10th of June, use 10 lb/1000 ft² of Perennial Ryegrass. However, it is preferable to seed temporary cover and seed later in Sept.

Nurse plants:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

Seeding date:
Best: Aug. 25 - Sept. 14
Possible: Aug. 20 - Oct. 29
Late start: Feb. 15 - Mar. 21

Soil amendments:
Apply lime and fertilizer according to soil test, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
Mulch:
Apply 4,000 lb/acre straw, wood chips, or equivalent cover of another suitable mulching material. Anchor mulch by tacking with asphalt, nails, or metal staples. Mulch is to be placed on the entire site.

Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY SEEDING SCHEDULE 2
(Recommended for Summer)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Perennial ryegrass	200	
None	0	

Seeding date:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

Soil amendments:
Follow recommendations of soil test, or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 5-10-10 fertilizer.
Mulch:
Apply 4,000 lb/acre straw, wood chips, or equivalent cover of another suitable mulching material. Anchor mulch by tacking with asphalt, nails, or metal staples. Mulch is to be placed on the entire site.

Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY SEEDING SCHEDULE 3
(For Grass-lined Channels & Ditches)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

Soil amendments:
Apply lime and fertilizer according to soil test, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
Mulch:
Apply 4,000 lb/acre straw, wood chips, or equivalent cover of another suitable mulching material. Anchor mulch by tacking with asphalt, nails, or metal staples. Mulch is to be placed on the entire site.

Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY SEEDING SCHEDULE 4
(Recommended for Late Winter & Early Spring)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

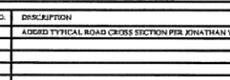
Soil amendments:
Apply lime and fertilizer according to soil test, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
Mulch:
Apply 4,000 lb/acre straw, wood chips, or equivalent cover of another suitable mulching material. Anchor mulch by tacking with asphalt, nails, or metal staples. Mulch is to be placed on the entire site.

Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY CONSTRUCTION ENTRANCE



USAGE: Contractor shall install a ground temporary construction entrance at all locations where vehicles enter or exit construction areas. Temporary construction entrances shall be maintained and used as required to prevent transporting excessive mud, sediment and dust into public roads.
MATERIALS AND INSTALLATION: Ground for temporary construction entrances shall be washed, 2 to 3 inch coarse aggregate placed to a minimum thickness of 6 inches. Other grade and properly rough grade the area to be used for the temporary construction entrance. Check and slope the entrance according to required for proper drainage. Stabilize wet or poor soils with geotextile fabric and additional measures as required to establish a firm foundation. Place stone surface and grade as required for traffic and proper drainage. Always install temporary construction entrances prior to commencing any work.
MAINTENANCE: Inspect temporary construction entrances daily and after each rain event. Clean and regrade pad as necessary for proper drainage and sediment control. Operate the entrance periodically as required with new, clean stone. Immediately remove any sediment that has collected or washed into public roads. After the entire site is stabilized, remove the temporary construction entrance and replace with the final road surface. It is necessary to prevent tracking of mud, the contractor shall, at their expense, provide, set up and operate an approved, portable wet wash station on top of the construction entrance. The contractor is responsible for providing, constructing and maintaining the wash station in a manner as required to prevent loss of sediment and erosion. Wash station shall be operated in accordance with local, state, national and international codes and regulations.



NOTES:
1. INSTALL UNDERDRAINS AT LOCATIONS SHOWN ON THE PLANS AND IN ADDITIONAL LOCATIONS IF RECOMMENDED BY THE ENGINEER DURING CONSTRUCTION. ANY UNDERDRAINS NOT SHOWN ON THE PLANS WILL BE PAID FOR AT THE UNIT PRICE FOR UNDERDRAINS SPECIFIED IN THE BIDDING. ANY UNDERDRAINS SHOWN ON THE PLANS WILL NOT BE PAID FOR AS SUCH BUT SHALL BE INCLUDED IN THE UNIT PRICE FOR CONSTRUCTION.
2. UNDERDRAINS SHALL BE INSTALLED AT A MINIMUM LONGITUDINAL SLOPE OF 0.5%. CONNECT UNDERDRAINS TO EXISTING UNDERDRAINS BY MEANS OF A 2" DIA. SMOOTH WALL HOPE DRAIN PIPE. THE UNDERDRAIN PIPE TO THE INTERIOR WALL OF THE STRUCTURE AND FULLY GROUTING THE ANNULAR SPACE. THE STRUCTURE SHALL BE APPROVED CONCRETE. PROVIDE WATERPROOF HOPE DRAIN ON UPSTREAM TERMINAL ENDS MEETING UNDERDRAIN HOPE PIPE SPECIFICATION.
3. BACKFILL MATERIAL SHALL BE PLACED IN MAX. 6" LIFTS AND COMPACTED TO 98% STD. PROCTOR DENSITY.
4. ALL UNDERDRAIN MATERIALS SHALL BE IN ACCORDANCE WITH NC DOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. LATEST EDITION, EXCEPT AS SPECIALLY NOTED OR SHOWN OTHERWISE.

PERMANENT SEEDING SCHEDULE 2
(For Slopes $\leq 3:1$, Avn. Soil, Low Maintenance)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
1. In Eastern Piedmont area 25 Business Days prior to 10th of May or common Bertram's Day. Use common Bertram's Day only when it is not a holiday.
2. After Aug. 15 use unseeded surface seed.
3. Where a seed approach is desired, seed before and substitute 40 lb/1000 ft² of Perennial Ryegrass.
4. To extend seeding season, seed from May 15 to 10th of June, use 10 lb/1000 ft² of Perennial Ryegrass. However, it is preferable to seed temporary cover and seed later in Sept.

Nurse plants:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

Seeding date:
Best: Aug. 25 - Sept. 14
Possible: Aug. 20 - Oct. 29
Late start: Feb. 15 - Mar. 21

Soil amendments:
Apply lime and fertilizer according to soil test, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
Mulch:
Apply 4,000 lb/acre straw, wood chips, or equivalent cover of another suitable mulching material. Anchor mulch by tacking with asphalt, nails, or metal staples. Mulch is to be placed on the entire site.

Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY SEEDING SCHEDULE 2
(Recommended for Late Winter & Early Spring)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

Soil amendments:
Apply lime and fertilizer according to soil test, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
Mulch:
Apply 4,000 lb/acre straw, wood chips, or equivalent cover of another suitable mulching material. Anchor mulch by tacking with asphalt, nails, or metal staples. Mulch is to be placed on the entire site.

Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY SEEDING SCHEDULE 3
(For Grass-lined Channels & Ditches)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

Soil amendments:
Apply lime and fertilizer according to soil test, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
Mulch:
Apply 4,000 lb/acre straw, wood chips, or equivalent cover of another suitable mulching material. Anchor mulch by tacking with asphalt, nails, or metal staples. Mulch is to be placed on the entire site.

Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY SEEDING SCHEDULE 4
(Recommended for Late Winter & Early Spring)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

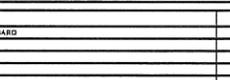
Soil amendments:
Apply lime and fertilizer according to soil test, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
Mulch:
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Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY CONSTRUCTION ENTRANCE



USAGE: Contractor shall install a ground temporary construction entrance at all locations where vehicles enter or exit construction areas. Temporary construction entrances shall be maintained and used as required to prevent transporting excessive mud, sediment and dust into public roads.
MATERIALS AND INSTALLATION: Ground for temporary construction entrances shall be washed, 2 to 3 inch coarse aggregate placed to a minimum thickness of 6 inches. Other grade and properly rough grade the area to be used for the temporary construction entrance. Check and slope the entrance according to required for proper drainage. Stabilize wet or poor soils with geotextile fabric and additional measures as required to establish a firm foundation. Place stone surface and grade as required for traffic and proper drainage. Always install temporary construction entrances prior to commencing any work.
MAINTENANCE: Inspect temporary construction entrances daily and after each rain event. Clean and regrade pad as necessary for proper drainage and sediment control. Operate the entrance periodically as required with new, clean stone. Immediately remove any sediment that has collected or washed into public roads. After the entire site is stabilized, remove the temporary construction entrance and replace with the final road surface. It is necessary to prevent tracking of mud, the contractor shall, at their expense, provide, set up and operate an approved, portable wet wash station on top of the construction entrance. The contractor is responsible for providing, constructing and maintaining the wash station in a manner as required to prevent loss of sediment and erosion. Wash station shall be operated in accordance with local, state, national and international codes and regulations.



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PERMANENT SEEDING SCHEDULE 3
(For Grass-lined Channels & Ditches)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
1. In Eastern Piedmont area 25 Business Days prior to 10th of May or common Bertram's Day. Use common Bertram's Day only when it is not a holiday.
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Seeding date:
Best: Aug. 25 - Sept. 14
Possible: Aug. 20 - Oct. 29
Late start: Feb. 15 - Mar. 21

Soil amendments:
Apply lime and fertilizer according to soil test, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
Mulch:
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Maintenance:
Monitor the success of the seeding and fully establish. May be mowed once or twice a year, but mowing is not necessary. Pruning, weeding, and other site management practices are to be performed as needed.

TEMPORARY SEEDING SCHEDULE 2
(Recommended for Late Winter & Early Spring)

Seeding mixture	Species	Rate (lb/1000 ft ²)
Tall fescue	200	
Perennial ryegrass	80	
None	0	

Seeding date:
Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day. Between May 1 and Aug. 15, use 10 lb/1000 ft² of common Bertram's Day.

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TEMPORARY SEEDING SCHEDULE 4
(Recommended for Late Winter & Early Spring)

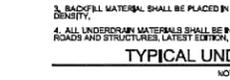
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Perennial ryegrass	80	
None	0	

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2. UNDERDRAINS SHALL BE INSTALLED AT A MINIMUM LONGITUDINAL SLOPE OF 0.5%. CONNECT UNDERDRAINS TO EXISTING UNDERDRAINS BY MEANS OF A 2" DIA. SMOOTH WALL HOPE DRAIN PIPE. THE UNDERDRAIN PIPE TO THE INTERIOR WALL OF THE STRUCTURE AND FULLY GROUTING THE ANNULAR SPACE. THE STRUCTURE SHALL BE APPROVED CONCRETE. PROVIDE WATERPROOF HOPE DRAIN ON UPSTREAM TERMINAL ENDS MEETING UNDERDRAIN HOPE PIPE SPECIFICATION.
3. BACKFILL MATERIAL SHALL BE PLACED IN MAX. 6" LIFTS AND COMPACTED TO 98% STD. PROCTOR DENSITY.
4. ALL UNDERDRAIN MATERIALS SHALL BE IN ACCORDANCE WITH NC DOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. LATEST EDITION, EXCEPT AS SPECIALLY NOTED OR SHOWN OTHERWISE.

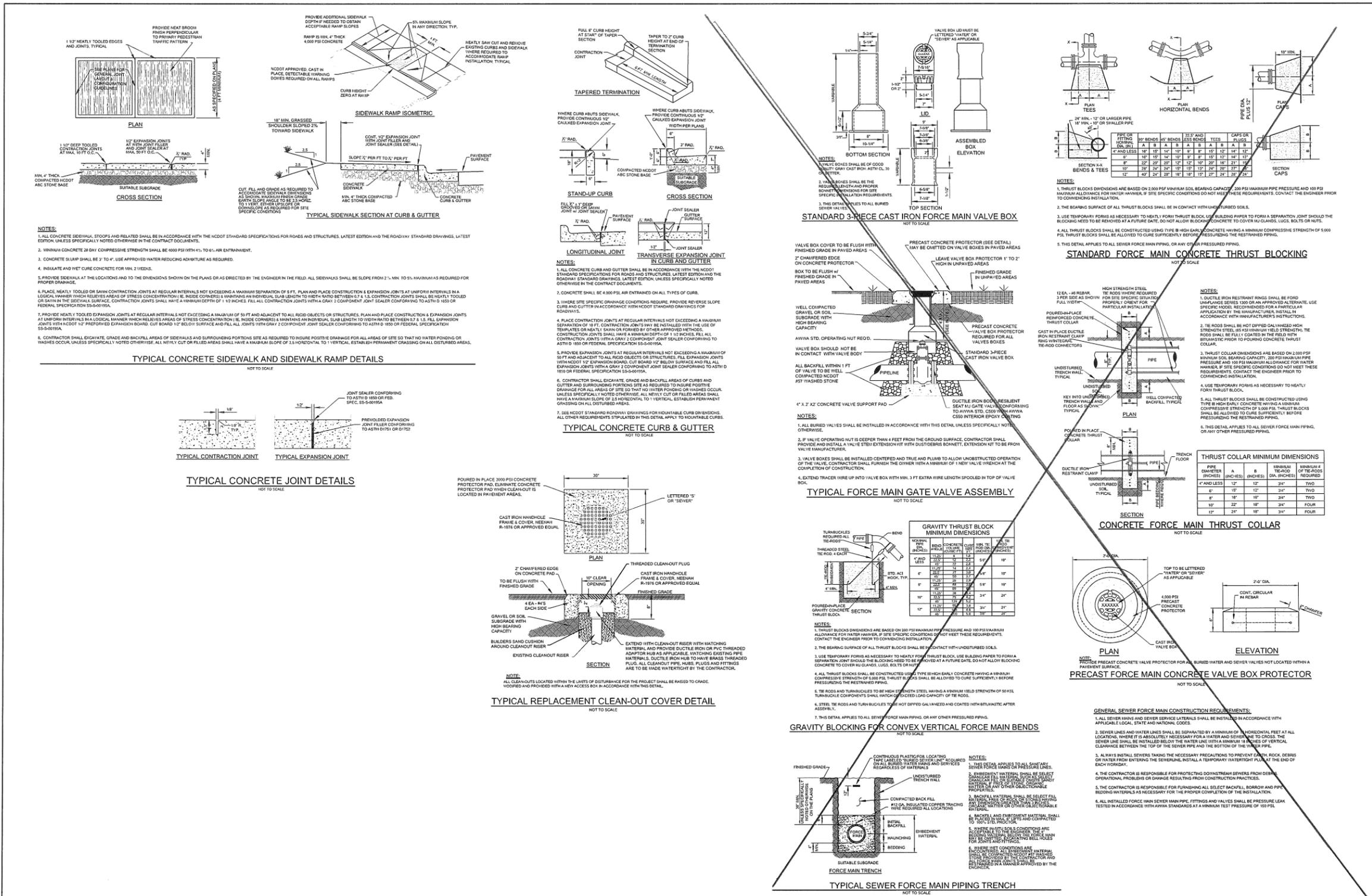


USAGE: Contractor shall install and maintain silt fencing as necessary to retain sediment from small, sloping areas where there is no concrete curb. Limit silt fencing to areas less than 100 ft long. Silt fences should not be used in locations where concentrated or channelized storm flows are anticipated.
MATERIALS AND INSTALLATION: Silt fences shall be 1.5 ft high with a minimum length of 5 ft. Silt fences shall have provisions for anchoring bar and wire fabric. Bar and wire fabric shall be a minimum depth of 2 ft. Post height should extend above the bar fabric.
MAINTENANCE: Inspect all silt fencing weekly and after each rainfall event. Repair and/or replace silt fencing as needed. Remove sediment deposits promptly and dispose of in a location not subject to erosion. Remove all silt fencing after the site is stabilized.



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REVISION NO.	DESCRIPTION	DATE	BY

Lofquist & Associates, Inc.
 PLANNING ENGINEERING DESIGN
 1100 S. 10th St., Suite 200, Raleigh, NC 27603
 Professional Service Dedicated to Clients & Employees

Drawn By: CAD Checked By: WVL File: ASG-ART.dwg
 Project No: 1000001 Plot Date: 4/19/13 Scale: AS NOTED

MISCELLANEOUS DETAILS

WEST SWAIN ELEMENTARY SCHOOL
 PROPOSED BUS ACCESS DRIVE
 Swain County Board of Education
 SWAIN COUNTY, NORTH CAROLINA

FINAL DRAWING - FOR REVIEW PURPOSES ONLY

SHEET NUMBER
C7.0