ITB #23-015
Cemetery Road WWTP Ponds Expansion

Addendum #4
Revised Site Plan

Please see attached (revised) site plan. The city changed the plan to take off the branded product that was used as an example on the information key on pages 27-30 of this original solicitation. Please refer to the updated plan which has the examples removed.

**THE CITY WILL ACCEPT ANY BRAND WHICH MATCHES THE SPECIFICATION. **

ACKNOWLEDGEMENT

It is the vendor's responsibility to ensure their receipt of all addenda, and to clearly acknowledge all addenda within their initial bid or proposal response in the space provided on the Submittal Checklist included in the original solicitation document. Failure to do so may subject the bidder to disqualification.

LEGEND

ABBREVIATIONS

℄	CENTER LINE
EOP	EDGE OF PAVEMENT
R/W	RIGHT-OF-WAY
SIR	SET IRON ROD
FIR	FOUND IRON ROD
SCM	SET CONCRETE MONUMENT
U&D	UTILITY AND DRAINAGE EASEMENT
RCP	REINFORCED CONCRETE PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
T.E.	TOP ELEVATION
I.E.	INVERT ELEVATION
TOS	TOE OF SLOPE
FF	FINISHED FLOOR
SHWL	SEASONAL HIGH WATER LEVEL

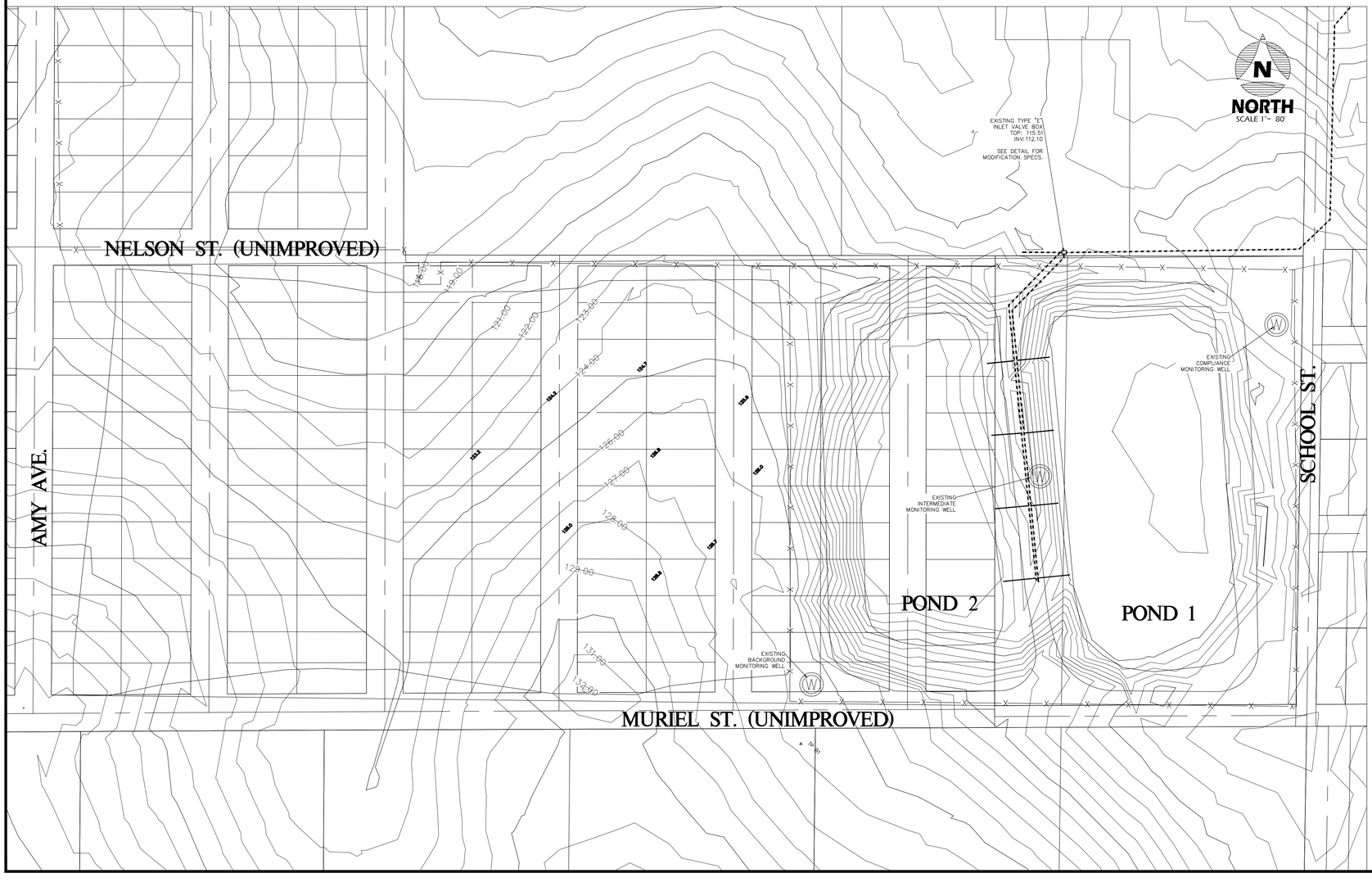
SYMBOLS

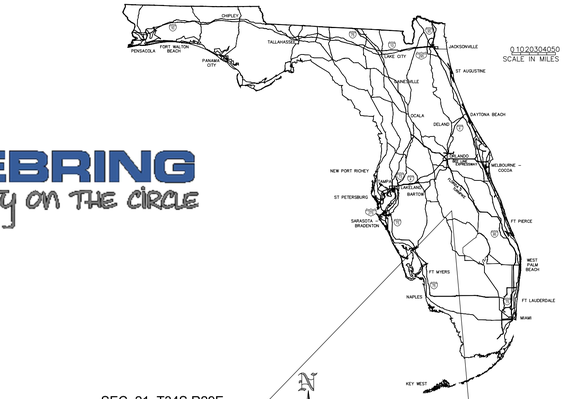
	DIRECTION OF WATER FLOW
144 X ELEV.00 DESC. 97.80	EXISTING OR PROPOSED GRADE
	SOIL BORING LOCATION
STOP	PROPOSED STOP SIGN
	STREET LIGHT
	PROPOSED CATCH BASIN
WV	WATER VALVE
	EXISTING POWER POLE
	SILT SCREEN
	HYDRANT
	BURIED ELECTRICAL
	EXISTING SANITARY SEWER LINE
	EXISTING WATER LINE
	TRAFFIC FLOW ARROW
	CONSTRUCTION FENCE
1	ADDENDUM MARKER

NOTE:
ELEVATIONS BASED ON NATIONAL GEODETIC SURVEY DATA SHEET DESIGNATION - A 657, PID - DJ6765, HIGHLANDS COUNTY, FL., ELEVATION OF 161.74 FEET IN NAVD 88 DATUM.

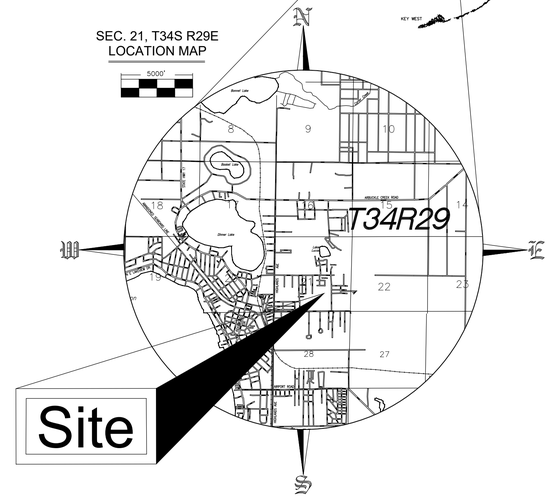
CONSTRUCTION PLAN FOR:

THE CITY OF SEBRING CEMETERY ROAD WWTP POND ADDITIONS





SEC. 21, T34S R29E
LOCATION MAP



PROJECT:	CITY OF SEBRING CEMETERY RD. WWTP POND ADDITIONS 4200 CEMETERY RD. SEBRING, FL 33870 SEC. 21, TWP. 34S, RGE. 29E
STRAP NUMBER:	S-21-34-29-A00-0010-0000 S-21-34-29-030-4010-0010
OWNER:	CITY OF SEBRING 368 S COMMERCE AVE. SEBRING, FL 33870 ATTN: BOB BOGGUS bobboggus@mysebring.com
ENGINEER:	ROGER DALE POLSTON, P.E. POLSTON ENGINEERING, INC. P.O. BOX 588 SEBRING, FL 33871-0588 (863) 385-5564 (863) 385-2462 FAX dale@polstonengineering.com
TOTAL OWNED AREA:	>1,094,807 SQ.FT. >25 AC.
TOTAL PROJECT AREA:	±1,094,807 SQ.FT. ±25 AC.
EXISTING USE:	
EXISTING ZONING:	PERCOLATION PONDS
EXISTING F.L.U.:	S S PUB
SOIL TYPE:	
GROUND COVER:	ASTATULA SAND
BUILDING HEIGHT:	ASPHALT, BUILDINGS, SAND, GRASS N/A
LOCAL, STATE AND FEDERAL PERMITS REQUIRED:	FDEP EXISTING PERMIT NO: FLA014311

CONTRACTOR:	(TO BE PUT OUT FOR BID)
SURVEYOR:	GARY L. GERMAINE GERMAINE SURVEYING, INC 3803 KENILWORTH BLVD. SEBRING, FLORIDA 33870 (813) 385-6856
TESTING LAB:	UNIVERSAL ENGINEERING SCIENCES INC. 5971 COUNTRY LAKES DRIVE FORT MYERS, FLORIDA 33905 (239) 995-1997 (239) 313-2347 FAX (OR OTHERS HIRED BY OWNER)

ENGINEER'S ESTIMATED CUT AND FILL QUANTITIES:

CUT: 115,327 CU.YD.
FILL: 3,850 CU.YD.
NET CUT: 111,478 CU.YD.

POND LOADING NOTES:

THE RESULTANT PROPOSED RATED FLOW WOULD BE 2.5 MGD OF FLOW TO THE POND SYSTEMS, 1.5 MGD TO THE TWO PROPOSED PONDS AND 1.0 MGD TO THE EXISTING PONDS. ONCE PERMITTED THE EXISTING PONDS CAN BE CONTINUED TO BE LOADED UP TO 1.5 MGD UNTIL 1.5 MGD OF FLOW IS EXCEEDED, THEN THE OPERATORS CAN ADJUST FLOW TO LIMIT THE EXISTING PONDS TO THE 1.0 MGD VIA THE GATE VALVE SYSTEM AND THE REST TO BE SENT TO THE PROPOSED PONDS.

ALWAYS CALL 811 TWO FULL BUSINESS DAYS BEFORE YOU DIG
Sunshine811.com

DATE	REMARK	DR	CH
06-29-23	ORIGINAL SUBMITTAL	DRJ	RDP

BID SET

CERTIFICATE OF AUTHORIZATION # 5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46030

Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD., SEBRING, FLORIDA 33870
863-385-5564 PHONE -- 863-385-2462 FAX

ENGINEER JOB # 01149

CITY OF SEBRING
CEMETERY ROAD WWTP
PERCOLATION POND ADDITIONS
EXISTING CONDITIONS

DRAWING SCALE
1"=80'

SHEET
C1 OF C4

NORTH
SCALE 1"= 60'

NELSON ST. (UNIMPROVED)

PROPOSED 12" GATE OPENING

PROPOSED TYPE "E" INLET BOX "B" TOP: 121.00 E INV: 110.50 W INV: 110.50 S INV: 110.00 SEE DETAIL FOR SLIDE GATE SPECS.

EXISTING CHAINLINK FENCE

EXISTING TYPE "E" INLET VALVE BOX TOP: 115.51 INV: 112.10

SEE DETAIL FOR MODIFICATION SPECS.

PROPOSED 45° HDPE BEND

LIKELY CONFLICT WITH ABANDONED 18" RCP. REMOVE PORTION AND DISPOSE OF

REMOVE ±16 LF OF EXSTING 18" HDPE

ADD ±8 LF OF 18" HDPE AND A 90° ELL TO TIE INTO NEW INLET

±1,610 LF OF 6' CHAINLINK FENCE (SEE DETAIL FOR SPEC.)

45° ELL 18" HDPE

690 LF OF 18" HDPE

715 LF OF 18" HDPE

±360 LF OF 15" HDPE EMERGENCY OVERFLOW

370 LF OF 18" HDPE

195 LF OF 15" HDPE EMERGENCY OVERFLOW

INV. 115.00

INV. 115.00

INV. 115.00

INV. 114.00

PROPOSED TYPE "E" INLET BOX "A" TOP: 120.00 N INV: 110.95 S INV: 110.90 W INV: 110.90 SEE DETAIL FOR SLIDE GATE SPECS.

EXISTING COMPLIANCE MONITORING WELL

EXISTING CHAINLINK FENCE TO BE REMOVED ±580

18" HDPE TEE & DISCHARGE PAD PIPE TOP 112.50

18" HDPE TEE & DISCHARGE PAD PIPE TOP 112.50

18" HDPE TEE & DISCHARGE PAD PIPE TOP 112.35

18" HDPE TEE & DISCHARGE PAD PIPE TOP 112.35

18" HDPE 90°EL UP & DISCHARGE PAD PIPE TOP 112.20

18" HDPE 90°EL UP & DISCHARGE PAD PIPE TOP 112.20

PROPOSED INTERMEDIATE MONITORING WELL

EXISTING INTERMEDIATE MONITORING WELL

EXISTING EFFLUENT LINES AS DEPICTED IN PREVIOUS PLANS DATED 1999. NO CHANGES ARE PROPOSED TO THE OUTFALL OR PLUMBING ADJACENT TO THE EXISTING PONDS EXCEPT AS SHOWN.

EXISTING BACKGROUND MONITORING WELL

PROPOSED BACKGROUND MONITORING WELL

PROPOSED CHAINLINK FENCE (SEE DETAIL FOR SPEC.)

AMY AVE.

SCHOOL ST.

POND 4

POND 3

POND 2

POND 1

MURIEL ST. (UNIMPROVED)

DATE	REMARK	DR	CH
06-29-23	ORIGINAL SUBMITTAL	DRJ	RDP

BID SET

CERTIFICATE OF AUTHORIZATION # 5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46030

PRINTED COPIES ARE NOT VALID WITHOUT ORIGINAL SIGNATURE AND RAISED SEAL

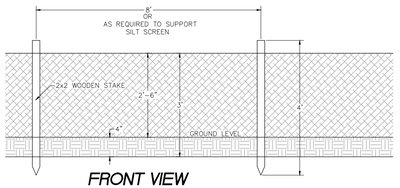
Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD., SEBRING, FLORIDA 33870
863-385-5864 PHONE -- 863-385-2462 FAX

ENGINEER JOB # 01149

CITY OF SEBRING
CEMETERY ROAD WWTP
PERCOLATION POND ADDITIONS
PROPOSED POND LAYOUT

DRAWING SCALE 1"=60'

SHEET C2 OF C4



FRONT VIEW

SILT FENCES

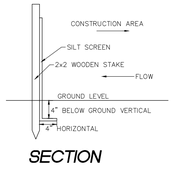
THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING TEMPORARY SILT FENCES, IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS, THESE SPECIFICATIONS, THE DETAILS AS SHOWN ON THE DRAWINGS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS.

SILT FENCES WILL BE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) TYPE III AS DESCRIBED IN FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 102, WITH FILTER FABRIC CONFORMING TO SECTION 985, FDOT STANDARD SPECIFICATIONS.

IN ALL CASES THE FILTER FABRIC WILL BE SECURELY ANCHORED TO POSTS AND/OR BURIED IN GROUND SO THAT IT WILL NOT BE PUSHED UP BY THE EXPECTED RUNOFF. THE ATTACHMENT TO EXISTING TREES WILL NOT BE PERMITTED.

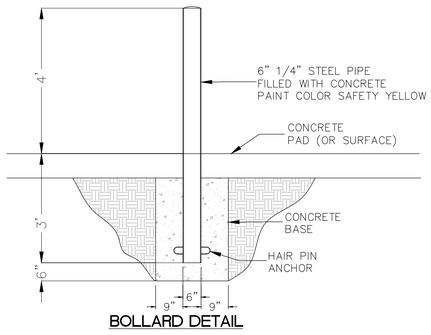
THE CONTRACTOR SHALL, AT HIS EXPENSE, PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETED AND ACCEPTED. IF SUCH EROSION CONTROL FEATURES MUST BE RECONSTRUCTED DUE TO CONTRACTOR'S NEGLIGENCE OR CARELESSNESS OR, IN THE CASE OF TEMPORARY EROSION CONTROL FEATURES, FAILURE BY CONTRACTOR TO INSTALL PERMANENT EROSION CONTROL FEATURES AS SCHEDULED, SUCH REPLACEMENT SHALL BE AT CONTRACTOR'S EXPENSE.

SILT FENCES MUST BE INSTALLED PRIOR TO ANY CONSTRUCTION AND MUST BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

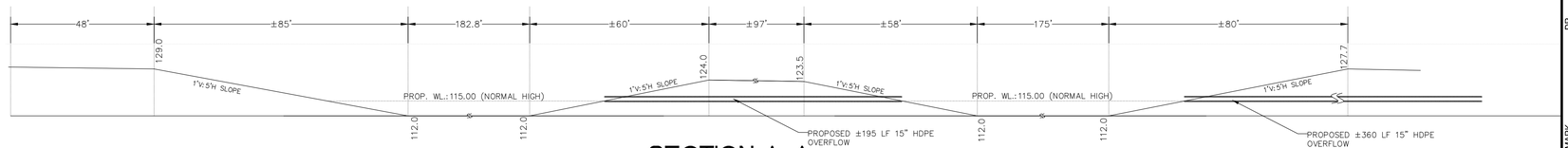


SECTION

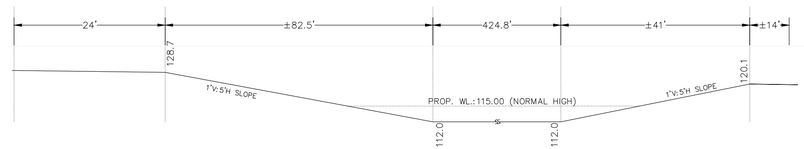
SILT SCREENS OR FENCES



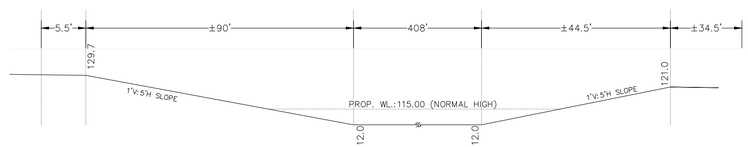
BOLLARD DETAIL



SECTION A-A
TYPICAL SECTION
N.T.S.

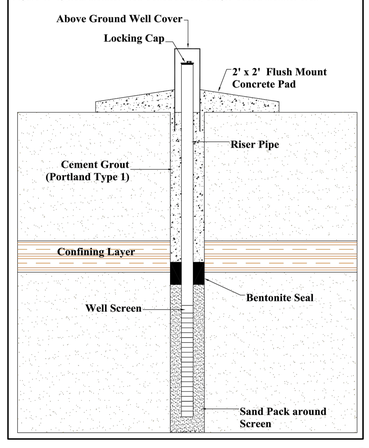


SECTION B-B
TYPICAL SECTION
N.T.S.

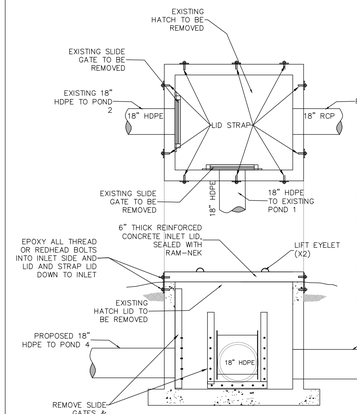


SECTION C-C
TYPICAL SECTION
N.T.S.

Figure 1: Typical Monitor Well Construction, Single-Cased Monitor Well

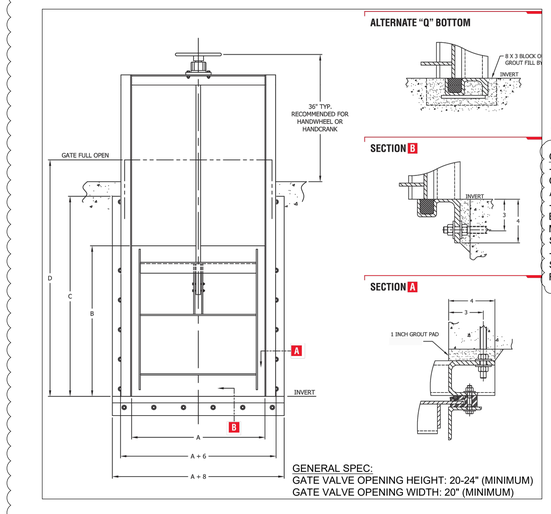


MONITORING WELL NOTES:
-MONITORING WELL LOCATIONS ARE CONTINGENT ON ISSUED FDEP PERMIT AND MAY CHANGE IN QUANTITY AND LOCATION FROM THE TWO LOCATIONS DEPICTED ON THESE PLANS, UNLESS OTHERWISE NOTED.
-WELL DEPTH VARIES BY LOCATION OF THE WELL.
-THE WELLS NEED TO FOLLOW THE FDEP "MONITORING WELL DESIGN AND CONSTRUCTION GUIDANCE MANUAL".
-IT IS RECOMMENDED THE WELLS INCORPORATE 10 FEET OF SCREEN.
-THE WELL SCREENS NEED TO STAY WITHIN OR BELOW THE DROUGHT WATER TABLE LEVEL AS TO REMAIN IN THE WATER TABLE FOR TESTING.



EXISTING SPLITTER BOX
PROPOSED MODIFICATIONS
N.T.S.

NOTES:
-REMOVE EXISTING SLIDE GATE RAILS, HARDWARE AND SLIDE GATE FROM THE INSIDE OF THE EXISTING SPLITTER BOX.
-REMOVE EXISTING HATCH COVER AND CLEAN THE TOP OF ANY DEBRIS OR SAND/DIRT/VEGETATION.
-INSTALL THE PROPOSED SLAB LID WITH RAM-NEK FLEXIBLE GASKET MATERIAL AROUND THE EDGES OF THE EXISTING BOX TOP. THE RESULT NEEDS TO BE A WATER TIGHT SEAL.
-SLAB TO BE STRAPPED DOWN AS SHOWN. HARDWARE NEEDS TO BE CORROSION RESISTANT.

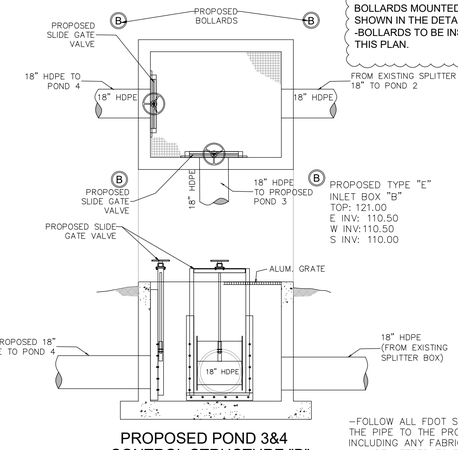


GENERAL SPEC:
GATE VALVE OPENING HEIGHT: 20-24" (MINIMUM)
GATE VALVE OPENING WIDTH: 20" (MINIMUM)

1

GATE VALVE ADDENDUM:
-NO CHANGES TO THE SPEC OR TYPE OF GATE VALVE AS PART OF THIS ADDENDUM.
-THE CONTRACTOR MAY SUPPLY ANY BRAND OR MODEL GATE VALVE THAT MEETS THE REQUIREMENTS IN THIS SPECIFICATION.
-FOLLOW VALVE VENDOR'S SPECIFICATIONS AND DIRECTIONS FOR INSTALLATION.

GATE VALVE NOTES:
-EXAMPLE GATE VALVE SPEC. SHOWN.
-MATERIAL NEEDS TO MATCH AS ALUMINUM OR STAINLESS TO PREVENT CORROSION.
-GATE VALVE NEEDS TO BE ADJUSTABLE AND ABLE TO BE FULLY OPEN AND CLOSED AND INFINITELY IN BETWEEN FOR OPERATOR ADJUSTMENT.
-ALTERNATE GATE VALVES MUST FOLLOW THE SAME GENERAL SPECIFICATION AND OPERATION.
-WHEN CLOSED, THE GATE VALVE NEEDS TO STOP >99% OF THE FLOW.



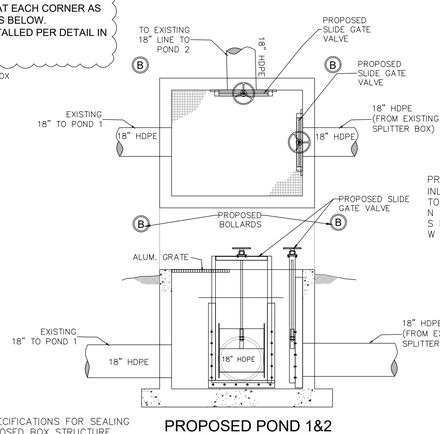
PROPOSED TYPE "E"
INLET BOX "B"
TOP: 121.00
E INV: 110.50
W INV: 110.50
S INV: 110.00

PROPOSED POND 3&4
CONTROL STRUCTURE "B"
N.T.S.

BOLLARD NOTES:
-NEW CONTROL STRUCTURES TO HAVE BOLLARDS MOUNTED AT EACH CORNER AS SHOWN IN THE DETAILS BELOW.
-BOLLARDS TO BE INSTALLED PER DETAIL IN THIS PLAN.

1

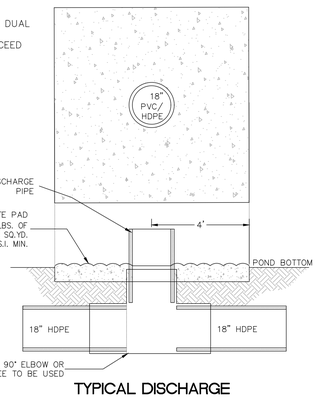
-FOLLOW ALL FDOT SPECIFICATIONS FOR SEALING THE PIPE TO THE PROPOSED BOX STRUCTURE. INCLUDING ANY FABRIC, GROUT, OR SEALS THAT MAY BE NEEDED TO PREVENT LEAKS.



PROPOSED TYPE "E"
INLET BOX "A"
TOP: 120.00
N INV: 110.95
S INV: 110.90
W INV: 110.90

PROPOSED POND 1&2
CONTROL STRUCTURE "A"
N.T.S.

-EXISTING PIPE IS 18" HDPE.
-ALL PROPOSED PIPE MAY BE PVC, HDPE DUAL WALL SMOOTH INTERIOR, OR EQUIVALENT.
-INTERNAL DIAMETERS MUST MEET OR EXCEED SHOWN SPECIFICATION.



TYPICAL DISCHARGE
PIPE OUTLET
N.T.S.

DATE	REMARK	DR	CH
06-29-23	ORIGINAL SUBMITTAL	DRJ	RDP
08-21-23	DETAIL REV.	DRJ	RDP

BID SET

CERTIFICATE OF AUTHORIZATION # 5684
ROGER DALE POLSTON P. E. # 33222
MARVIN LUTHER WOLFE P.E. # 46030

Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD., SEBRING, FLORIDA 33870
863-385-5564 PHONE - 863-385-2462 FAX

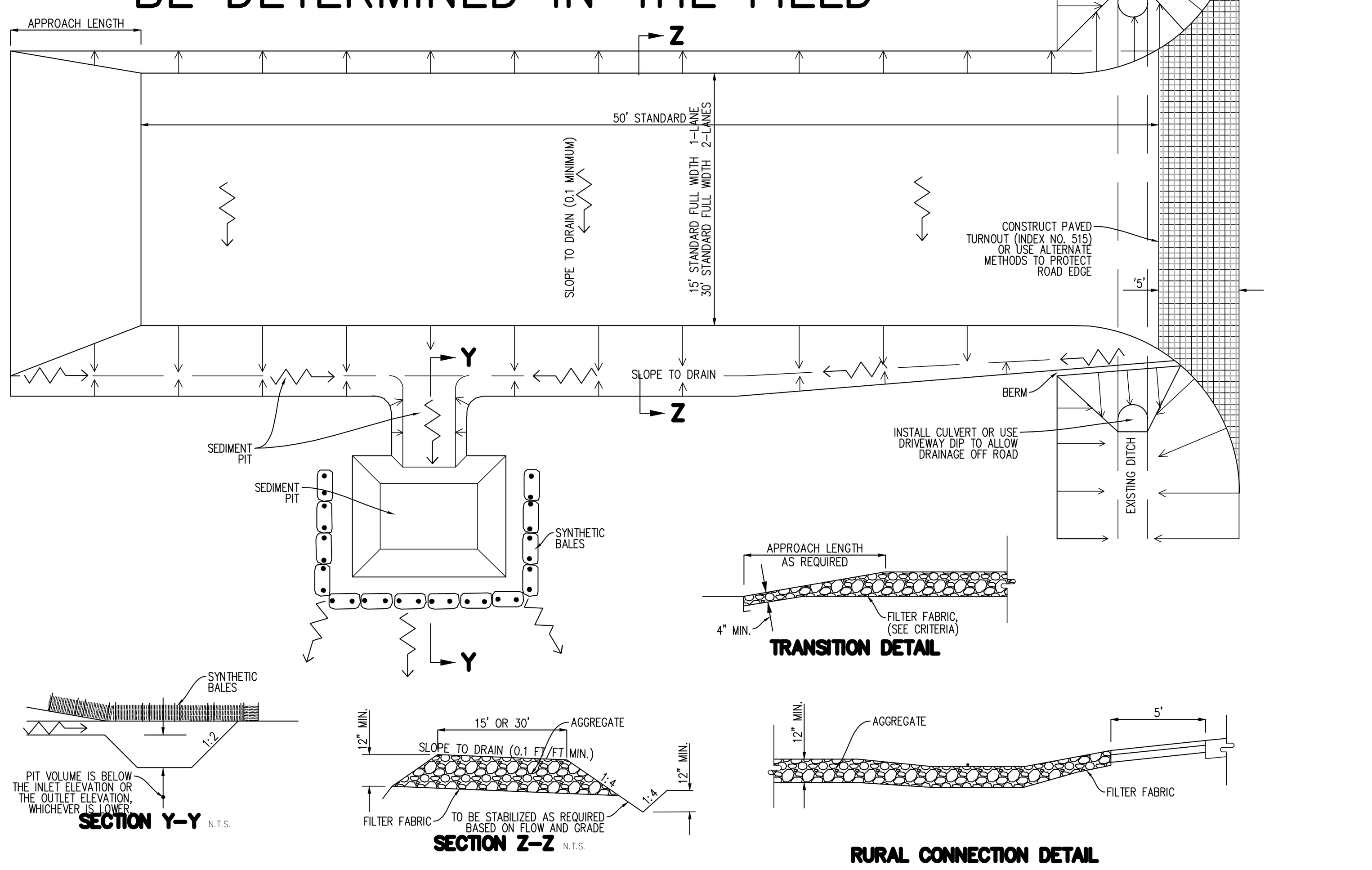
ENGINEER JOB # 01149

CITY OF SEBRING
CEMETERY ROAD WWTP
PERCOLATION POND ADDITIONS
CONSTRUCTION DETAILS

DRAWING SCALE
N.T.S.

SHEET
C3 OF C4

CONSTRUCTION ACCESS LOCATION TO BE DETERMINED IN THE FIELD

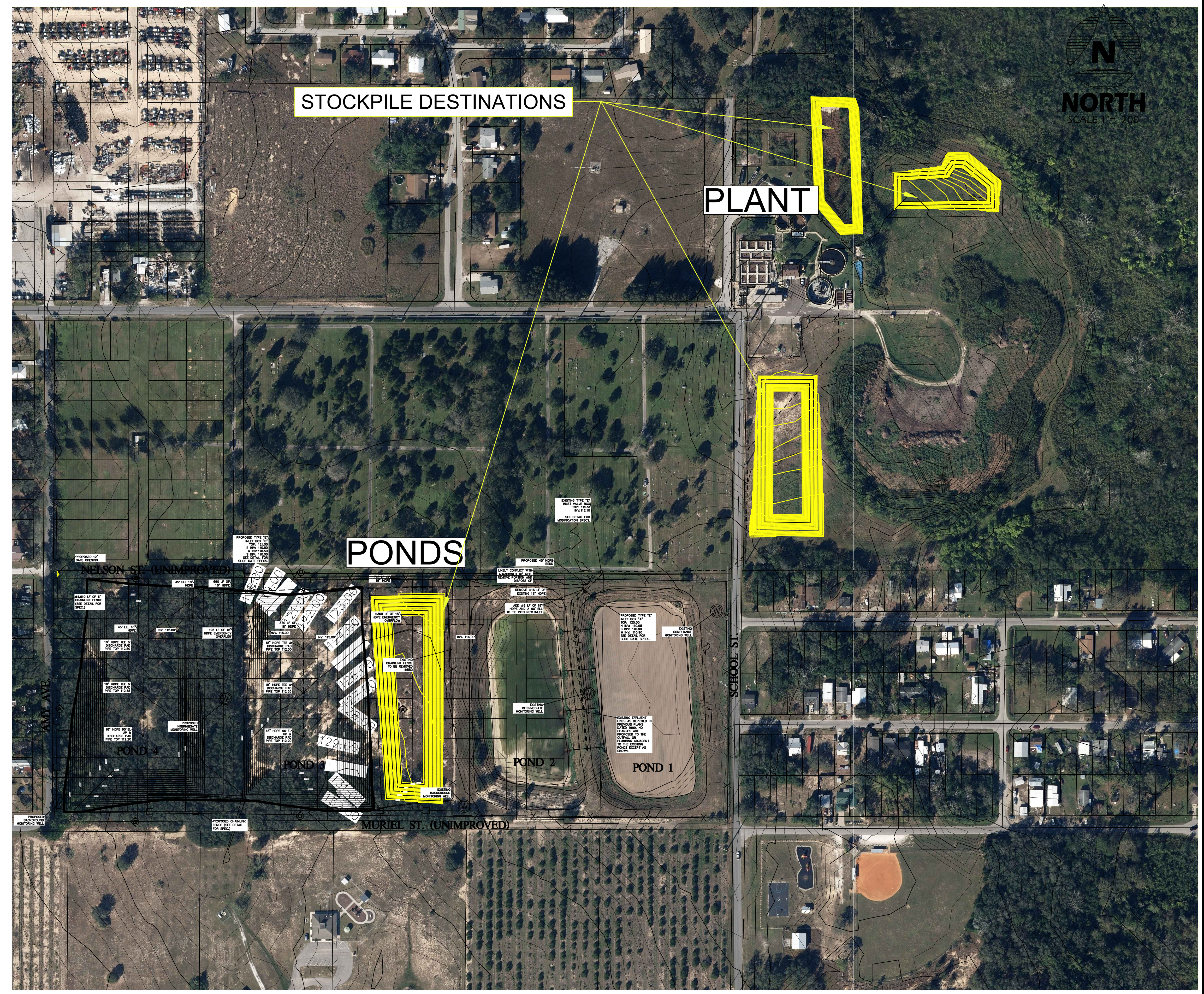


GENERAL NOTES
1. A SOIL TRACKING PREVENTION DEVICE (STPD) SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED BY THE ENGINEER FOR POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFFSITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE CONSTRUCTION PROJECT SHALL BE DIRECTED THRU A STPD. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STPD.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFFSITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ITS USE.
3. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS (INCLUDING THE STPD AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER.
4. AGGREGATES SHALL BE AS DESCRIBED IN SECTION 901 EXCLUDING 901-2.3. AGGREGATES SHALL BE FDOT SIZE #1. IF THIS SIZE IS NOT AVAILABLE, THE NEXT AVAILABLE SMALLER SIZE AGGREGATE MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. SIZES CONTAINING EXCESSIVE SMALL AGGREGATE WILL TRACK OFF THE PROJECT AND ARE UNSUITABLE.
5. THE SEDIMENT PIT SHOULD PROVIDE A RETENTION VOLUME OF 3600 CUBIC FEET/ACRE OF SURFACE AREA DRAINING TO THE PIT.
WHEN THE STPD IS ISOLATED FROM OTHER DRAINAGE AREAS. THE FOLLOWING PIT VOLUMES WILL SATISFY THIS REQUIREMENT:
15' X 50' = 100 FT^3   30' X 50' = 200 FT^3
AS AN OPTION TO THE SEDIMENT PIT, THE WIDTH OF THE SWALE BOTTOM CAN BE INCREASED TO OBTAIN FHE VOLUME. WHEN THE SEDIMENT PIT OR SWALE VOLUME HAS BEEN REDUCED TO ONE HALF, IT SHALL BE CLEANED. WHEN A SWALE IS USED, HAY BALES OR SILT FENCE SHALL BE PLACED ALONG THE ENTIRE LENGTH.
6. THE SWALE DITCH DRAINING THE STPD SHALL HAVE A 0.2% MINIMUM AND A 1.0% MAXIMUM GRADE ALONG THE STPD AND TO THE SEDIMENT PIT.
7. MITERED END SECTIONS ARE NOT REQUIRED WHEN THE SIDEDRAIN PIPE SATISFIES THE CLEAR ZONE REQUIREMENTS.
8. THE STPD SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION. TO PREVENT OFFSITE TRACKING, THE STPD SHALL BE RINSED (DAILY WHEN IN USE) TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STPD MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
9. A STPD SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SOIL TRACKING PREVENTION DEVICE, EA. THE UNIT PRICE SHALL CONSTITUTE FULL COMPENSATION FOR CONSTRUCTION, MAINTENANCE, REPLACEMENT OF MATERIALS, REMOVAL, AND RESTORATION OF THE AREA UTILIZED FOR THE STPD; INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, TEMPORARY PIPE (INCLUDING MES WHEN REQUIRED), FILTER FABRIC, AGGREGATE, PAVED TURNOUT (INCLUDING ASPHALT AND BASE CONSTRUCTION), DITCH STABILIZATION, APPROACH ROUTE STABILIZATION, SEDIMENT REMOVAL AND DISPOSAL, WATER, RINSING AND CLEANING OF THE STPD AND CLEANING OF PUBLIC ROADS, GRASSING AND SOD. HAY BALES SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR HAY OR STRAW BALED, EA. SILT FENCE SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE. LF.
10. THE NOMINAL SIZE OF A STANDARD STPD IS 15' X 50' UNLESS OTHERWISE SHOWN IN THE PLANS. IF THE VOLUME OF ENTERING AND EXITING VEHICLES WARRANT, A 30' WIDTH STPD MAY BE USED IF APPROVED BY THE ENGINEER. WHEN A DOUBLE WIDTH (30') STPD IS USED, THE PAY QUANTITY SHALL BE 2 FOR EACH LOCATION.

CONSTRUCTION NOTES:
--ELEVATIONS SHOWN ARE A REPRESENTATION OF FIELD CONDITIONS AND IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY INFORMATION IN FIELD. THE INTENT FOR THE PROPOSED CONSTRUCTION IS TO MATCH THE EXISTING SLOPE OF THE ROADWAY AND SHOULDERS (UNLESS SHOWN OTHERWISE)
--THESE PLANS HAVE BEEN DRAWN TO DEPICT THE REQUIRED CONSTRUCTION WITHIN THE PROJECT AREA. IN CERTAIN CASES THE SIZE AND/OR LOCATION OF PROPOSED CONSTRUCTION HAS BEEN BLOWN-UP TO SHOW ITEMS. THEREFORE, LOCATIONS ON THE DRAWINGS MAY NOT BE EXACT AND SHOULD NOT BE SCALED FOR CONSTRUCTION. ITEMS SUCH AS INLETS, CULVERTS, MITERED END SECTIONS, SIGNS, STRIPING, TURN LANES, SLOPES ETC. WILL NEED TO BE CONSTRUCTED USING EXISTING SITE CONDITIONS AND CURRENT F.D.O.T. CONSTRUCTION REQUIREMENTS AND REGULATIONS.
--THE TOPOGRAPHY SHOWN FOR PROJECT IS A REPRESENTATION OF FIELD CONDITIONS. THE DESIGN OF THIS PROJECT IS BASED ON THE TOPOGRAPHY PROVIDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY INFORMATION IN FIELD. ANY DISCREPANCIES BETWEEN THE DESIGN TOPOGRAPHY AND FIELD CONDITIONS DURING CONSTRUCTION SHOULD BE BROUGHT TO THE ENGINEER OF RECORDS ATTENTION IMMEDIATELY SO THAT ALTERATIONS IN THE DESIGN CAN BE MADE TO KEEP THE FINAL SITE CONSTRUCTION IN COMPLIANCE WITH THE GOVERNING AGENCIES REGULATIONS.
--THE INFORMATION AND DESIGN SHOWN ON THESE DRAWINGS IS BASED ON THE BEST AVAILABLE INFORMATION PROVIDED FOR DESIGN. THE DRAWING IS TO SCALE AS MUCH AS POSSIBLE; HOWEVER NO MEASUREMENTS SHOULD BE MADE BY SCALING FROM THESE DRAWINGS AS SOME ITEMS MAY BE NOT TO SCALE FOR DRAWING CLARITY. ANY QUESTIONS OR CONFLICTS SHOULD BE BROUGHT TO THE ENGINEER IMMEDIATELY FOR CLARIFICATION OR RESOLUTION. POLSTON ENGINEERING INC. SHALL NOT BE RESPONSIBLE FOR ANY ERRORS MADE BY OTHERS CAUSED BY MAKING ASSUMPTIONS ABOUT THE PLANS OR ERRORS CAUSED BY SCALING THE PLANS. ALL CONSTRUCTION SHALL FOLLOW THE ACCEPTED SAFETY PROCEDURES AND CONSTRUCTION TECHNIQUES AS REQUIRED BY ANY APPLICABLE GOVERNMENT STANDARDS.
--THE UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS ARE REPRESENTATIONAL ONLY. FIELD INVESTIGATION FOR EXACT LOCATIONS IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
--ALL CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH THE CURRENT FDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION AND THE ROADWAY AND TRAFFIC DESIGN STANDARD INDEX.
--ALL DISTURBED PREVIOUSLY IMPROVED AREAS WILL BE COMPLETELY RESTORED TO ORIGINAL CONDITIONS, THIS INCLUDES SODDING, LANDSCAPING, IRRIGATION SYSTEMS, STRUCTURES, ETC.
--THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC DURING THE DURATION OF CONSTRUCTION.
--ALL SAFETY PRECAUTIONS DURING CONSTRUCTION MUST MEET F.D.O.T. SPECIFICATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND IMPLEMENTING A TRAFFIC CONTROL PLAN DURING THE DURATION OF CONSTRUCTION WITHIN THE RIGHT OF WAYS.
--ALL CONCRETE USED WILL BE 3000 PSI (MINIMUM).

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

ON SITE AND NEARBY MATERIAL STORAGE DESTINATION LOCATIONS



DIVISION 2: TECHNICAL SPECIFICATIONS FOR CONSTRUCTION WITHIN THE COUNTY RIGHT-OF-WAY

SEC. 02.200. GENERAL: THE SPECIFICATIONS AND DRAWINGS ARE AN INTEGRATED PART OF THE CONTRACT DOCUMENTS AND AS SUCH WILL NOT STAND ALONE IF USED INDEPENDENTLY AS INDIVIDUAL PARTS, PARAGRAPHS, OR DRAWING SHEETS. THE DRAWINGS AND SPECIFICATIONS ESTABLISH MINIMUM STANDARDS OF QUALITY FOR A PROJECT. THEY DO NOT PURPORT TO COVER ALL DETAILS ENTERING INTO ITS DESIGN AND CONSTRUCTION OR OF ALL MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THE WORK.

SEC. 02.201. MAINTENANCE OF TRAFFIC:
A. CONTROL DEVICES: THE CONTRACTOR SHALL BE REQUIRED TO KEEP THE ENTIRE WORK SITE IN FULL COMPLIANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS, CURRENT EDITION AND THE USDOT, FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
B. DETOURS: DETOURS SHALL REQUIRE APPROVAL BY THE COUNTY ENGINEER. ANY DETOURS APPROVED AS A PART OF THE TRAFFIC CIRCULATION PLAN, SHALL BE REQUIRED TO BE PROPERLY POSTED AND A MINIMUM OF 48-HOURS ADVANCE NOTICE SHALL BE GIVEN TO THE COUNTY ENGINEER'S OFFICE, LAW ENFORCEMENT AGENCIES, FIRE DEPARTMENT, SCHOOL BOARD AND EMERGENCY SERVICES. ADVANCE NOTICE SHALL ALSO BE PLACED AT THE LAST INTERSECTION BEFORE THE DETOUR.
C. DRIVEWAYS KEPT OPEN: NO BUSINESS WILL HAVE VEHICULAR ACCESS TOTALLY BLOCKED AT ANY TIME. DRIVEWAY ACCESS TO PROPERTY WILL NOT BE BLOCKED FOR MORE THAN 8 HOURS ON ANY DAY PROPERTY OWNERS WILL BE NOTIFIED IN WRITTEN FORM BY THE CONTRACTOR 24 HOURS PRIOR TO THE BLOCKING OF ANY DRIVEWAY, BUSINESS, OR PROPERTY ACCESS. BLOCKING OF DRIVEWAYS WILL REQUIRE ADVANCE APPROVAL BY THE COUNTY ENGINEER.
D. MAINTENANCE OF TRAFFIC VIOLATIONS: THE COUNTY WILL REPORT ANY KNOWN VIOLATION OF THE REQUIRED MAINTENANCE OF TRAFFIC TO THE OWNER, PROJECT ENGINEER, OR CONTRACTOR. THE CONTRACTOR WILL HAVE 4 HOURS OF REGULARLY SCHEDULED WORK TIME TO BRING THE SITE INTO FULL COMPLIANCE. IF THIS IS NOT DONE, THE COUNTY WILL HAVE THE OPTION TO TAKE ANY CORRECTIVE MEASURES IT FEELS NECESSARY AND TO BILL THE OWNER FOR THE COST OF THESE MEASURES.
E. TRAFFIC CONTROL PLAN APPROVAL: PRIOR TO THE COMMENCEMENT OF WORK AT THE JOB SITE, THE PROJECT ENGINEER SHALL RECEIVE APPROVAL OF HIS TRAFFIC CONTROL PLAN FROM THE COUNTY ENGINEER ACCESS FOR LOCAL TRAFFIC SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD OF THE PROJECT.

SEC. 02.202. DRIVEWAY INGRESS AND EGRESS MAINTENANCE: THIS SPECIFICATION SHALL ONLY APPLY WHERE RESIDENCES, BUSINESSES, AND OTHER TYPES OF PROPERTY FRONT ON THE ROAD TO BE CONSTRUCTED OR RECONSTRUCTED, AND DRIVEWAY CONNECTIONS ARE TO BE DISTURBED.
A. CONTRACTOR WILL BE REQUIRED TO PLACE COMMERCIAL BASE MATERIAL IN DRIVEWAYS AND/OR ACCESS POINTS AFFECTED BY THE PROJECT, WHERE CONSIDERED NECESSARY BY THE PROJECT ENGINEER TO PROVIDE SAFE, STABLE AND REASONABLE ACCESS TO RESIDENCES, BUSINESSES, AND PROPERTY.
B. THE MATERIALS TO BE USED FOR DRIVEWAY MAINTENANCE SHALL BE LIMEROCK, STONE OR OYSTER SHELL. THE GRADE AND QUALITY OF THE MATERIAL SHALL BE THAT OFFERED FOR COMMERCIAL SUPPLY IN THE AREA. COMMERCIAL MATERIALS USED IN LOCATIONS WHICH HAVE INADEQUATE DRAINAGE OR ARE PRONE TO BE WET, SHALL BE OF A STABLE CHARACTER, UNAFFECTED BY WET CONDITIONS.
C. THE MATERIAL SHALL BE PLACED IN THE DRIVEWAY AS DIRECTED BY THE PROJECT ENGINEER. THE MATERIAL SHALL BE LEVELED, MANIPULATED, COMPACTED AND MAINTAINED, TO THE EXTENT APPROPRIATE FOR THE INTENDED USE OF THE PARTICULAR DRIVEWAY.
D. AS PERMANENT DRIVEWAY CONSTRUCTION IS ACCOMPLISHED AT A PARTICULAR LOCATION, PREVIOUSLY PLACED COMMERCIAL MATERIALS WHICH ARE SUITABLE FOR REUSE MAY BE SALVAGED AND REUSED ON OTHER DRIVEWAYS AS DIRECTED.

SEC. 02.203. CLEARING AND GRUBBING:
A. CLEARING AND GRUBBING SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TIMBER, BRUSH, VEGETATION, STUMPS, ROOTS, BOULDERS, PAVEMENT, RUBBISH AND DEBRIS AND ALL OTHER MATERIALS AND OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND AND THE SURFACE OF WORK AREAS. MATERIAL RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF BY THE CONTRACTOR IN A PROPER PLACE.
B. AS AN EXCEPTION TO THE ABOVE PROVISIONS, WHERE SO DIRECTED BY THE PROJECT ENGINEER AND APPROVED BY THE COUNTY ENGINEER, DESIRABLE TREES WITHIN THE ROADWAY SHALL BE TRIMMED, PROTECTED AND LEFT STANDING. BRANCHES OF TREES EXTENDING OVER THE AREA OCCUPIED BY THE ROADWAY SHALL BE TRIMMED AS DIRECTED, TO GIVE A CLEAR HEIGHT OF 16 FEET ABOVE THE ROADWAY.
C. WITHIN THE RIGHT-OF-WAY AND WITHIN ALL SWALES AND DITCHES, ALL STUMPS, ROOTS, ETC., PROTRUDING THROUGH OR APPEARING ON THE SURFACE OF THE COMPLETED EXCAVATION SHALL BE REMOVED OR CUT OFF BELOW THE FINISHED EXCAVATION SURFACE. WITHIN ALL OTHER AREAS WHERE CLEARING AND GRUBBING IS TO BE DONE, ROOTS AND OTHER DEBRIS, PROJECTING THROUGH OR APPEARING ON THE SURFACE OF THE ORIGINAL GROUND, SHALL BE REMOVED TO A DEPTH OF ONE FOOT BELOW THE BOTTOM OF THE SUBGRADE.
D. BURNING OF SUCH MATERIALS WILL ONLY BE ALLOWED WHEN A PROPER BURN PERMIT CAN BE OBTAINED AND ALL SUCH BURNING SHALL BE SUBJECT TO APPLICABLE LAWS, ORDINANCES AND REGULATIONS AND SHALL BE DONE AT LOCATIONS WHERE TREES AND SHRUBS ADJACENT TO THE CLEARED AREA WILL NOT BE HARMED. BURNING MAY BE REQUIRED TO CEASE IMMEDIATELY IF COMPLAINTS ARE RECEIVED BY THE PROJECT ENGINEER OR THE COUNTY ENGINEER.

SEC. 02.204. EARTHWORK: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND ALL ACTIVITIES PERFORMED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.205. RIGID DITCH CHECKS: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.206. RIPRAP (SAND-CEMENT): ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.207. INSPECTIONS, FIELD MEASUREMENTS AND LABORATORY TESTS:
A. GENERAL: THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN ADVANCE OF THE TIME AND DATE WHEN ANY TESTS CAN BE CONDUCTED, SO THAT THE PROJECT ENGINEER MAY SCHEDULE THE REQUIRED TESTING WITH THE INDEPENDENT TESTING LABORATORY. THE TEST SAMPLES SHALL BE TAKEN BY EITHER AN EMPLOYEE OF THE INDEPENDENT TESTING LABORATORY OR THE PROJECT ENGINEER OR HIS REPRESENTATIVE. IN NO CASE SHALL THE CONTRACTOR TAKE THE SAMPLES OR TRANSPORT THE SAMPLES TO THE LABORATORY. THE PROJECT ENGINEER SHALL INSPECT ALL CONSTRUCTION AND IS AUTHORIZED TO CALL TO THE ATTENTION OF THE CONTRACTOR ANY FAILURE OF WORK OR MATERIALS TO CONFORM WITH THE PLANS AND SPECIFICATIONS. THE FOLLOWING LABORATORY TESTS OR FIELD MEASUREMENTS AND FREQUENCY OF SUCH SHALL BE MADE IN ACCORDANCE WITH THE PROJECT ENGINEER'S DIRECTION BY THE INDEPENDENT TESTING LABORATORY, AT THE PROJECT EXPENSE, AND IN KEEPING WITH GOOD ENGINEERING PRACTICES. THE CONTRACTOR IS REQUIRED TO CONDUCT AND/OR STOP HIS WORK SO THAT THE APPROPRIATE TESTS, SAMPLES AND MEASUREMENTS CAN BE MADE INA SAFE AND PROPER MANNER. THE CONTRACTOR SHALL RECEIVE COPIES OF THE TEST REPORTS FROM THE PROJECT ENGINEER. THE INDEPENDENT TESTING LABORATORY SHALL MAIL OR HAND DELIVER COPIES OF ALL TESTS DIRECTLY TO THE OFFICE OF THE COUNTY ENGINEER.
B. SUB-BASE AND SHOULDER: SUB-BASE AND SHOULDER TESTS SHALL BE MADE AS FOLLOWS:
1. PROCTOR: ONE PER MILE UNLESS THE NATIVE SOILS ARE SIGNIFICANTLY DIFFERENT. IN THAT CASE, ONE PER EVERY MAJOR SOILS TYPE. SAMPLE SHALL BE TAKEN FROM THE ROADWAY AFTER SCARIFYING AND MIXING.
2. WIDTH: EVERY 200 FEET AFTER SUB-BASE AND SHOULDERS HAVE BEEN MIXED, AND COMPACTED AND PRIOR TO ANY "BOXING OUT" OPERATION.
3. DEPTH:
A. SUB-BASE: EVERY 200 FEET WITHIN THE AREA TO BE COVERED BY THE BASE MATERIAL AFTER FINAL GRADING AND COMPACTION; JUST PRIOR TO THE PLACEMENT OF THE BASE MATERIAL. TESTS WILL BE CONDUCTED IN A ZIG-ZAG PATTERN COVERING THE ENTIRE AREA DESCRIBED ABOVE.
B. SHOULDER: EVERY 400 FEET, EACH SIDE, WITHIN THE SHOULDER AREAS PRIOR TO ANY "BOXING OUT" OPERATION, BUT AFTER MIXING AND COMPACTION.
1. FLORIDA BEARING VALUE (FBV): AT 200 FOOT INTERVALS TAKE THREE SAMPLES. SAMPLES SHALL BE TAKEN FROM ONE FOOT IN FROM EACH OUTSIDE EDGE OF THE SHOULDER AND ONE FROM WITHIN THE TRAFFIC LANE (AREAS). COMBINE THE TOP 1/2 OF THREE CONSECUTIVE SAMPLES INTO ONE COMPOSITE SAMPLE AND COMBINE THE BOTTOM 1/2 OF THE SAME THREE SAMPLES INTO ANOTHER SINGLE COMPOSITE SAMPLE MINIMUM ACCEPTABLE FBV IS 60 PSI. (NO TOLERANCE ACCEPTABLE.)
2. DENSITY:
A. SUB-BASE: EVERY 200 FEET, IN A ZIG-ZAG PATTERN, AND JUST PRIOR TO THE PLACEMENT OF THE BASE. EVERY OTHER TEST WILL BE MADE AT THE PROPOSED EDGE OF THE PAVEMENT. MINIMUM ACCEPTABLE VALUE: 95% DENSITY AS PER AASHTO T-180.
B. SHOULDER: EVERY 400 FEET, ONE TO TWO FEET IN FROM THE OUTSIDE EDGE OF THE SHOULDER, ON EACH SIDE OF THE ROAD. DENSITY SAMPLES SHALL BE TAKEN JUST PRIOR TO THE "BOXING OUT" OPERATION FOR THE BASE. MINIMUM ACCEPTABLE VALUE: 95% DENSITY AS PER AASHTO T-180.
3. FAILURES: ANY FAILURE REVEALED BY THE REQUIRED FIELD MEASUREMENTS AND LABORATORY TESTS REQUIRING ADDITIONAL MATERIAL SHALL REQUIRE THE CONTRACTOR TO SCARIFY THE EXISTING MATERIAL, PLACE THE ADDITIONAL MATERIAL AND THEN RE-SHAPE AND RE-COMPACT THE SUB-BASE FOR A MINIMUM DISTANCE OF 50 FEET EACH SIDE OF THE FAILURE. DEFICIENT DENSITY WILL REQUIRE ADDITIONAL COMPACTION A MINIMUM OF 50 FEET EACH SIDE OF THE FAILURE.
4. PLACEMENT OF THE BASE: THE BASE SHALL BE PLACED ON THE SUB-BASE ONLY AFTER COPIES OF THE RESULTS OF THE REQUIRED FIELD MEASUREMENTS AND LABORATORY TESTS FOR THE SUB-BASE HAVE BEEN RECEIVED AND APPROVED BY THE PROJECT ENGINEER.
C. BASE (LIMEROCK OR SHELLROCK): TESTS FOR THE BASE SHALL BE MADE AS FOLLOWS:
1. MATERIAL: FOR MATERIAL WHOSE SOURCE IS AN FDOT APPROVED AND CERTIFIED MINING PIT, SUBMITTAL OF COPIES OF THE PIT CERTIFICATION SHALL BE REQUIRED; FOR MATERIAL FROM ANY OTHER SOURCE, SUBMITTAL OF TEST RESULTS FROM AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH A BASE MATERIAL TESTING PLAN, APPROVED IN ADVANCE BY THE COUNTY ENGINEER, SHALL BE REQUIRED.
2. PROCTOR: ONE PER MILE UNLESS THE BASE MATERIAL CHANGES IN QUALITY; SAMPLE MUST BE TAKEN FROM AN ON-SITE STOCKPILE.
3. WIDTH, DEPTH, CROWN: EVERY 200 FEET AS SHOWN ON PLANS. SEE TYPICAL SECTIONS IN SECTION SIX: ILLUSTRATIONS FOR MINIMUM REQUIREMENTS.
4. DENSITY: EVERY 200 FEET IN A ZIG-ZAG PATTERN WITHIN THE AREAS TO BE COVERED BY PAVEMENT. MINIMUM ACCEPTABLE VALUE: 95% DENSITY AS PER AASHTO T-180.
5. BASE FAILURES: ANY FAILURES OF THE BASE REVEALED BY THE REQUIRED FIELD MEASUREMENT AND LABORATORY TESTS REQUIRING ADDITIONAL BASE MATERIAL SHALL REQUIRE THE CONTRACTOR TO SCARIFY THE EXISTING BASE MATERIAL, PLACE THE ADDITIONAL MATERIAL AND THEN RE-SHAPE AND RE-COMPACT THE BASE FOR A MINIMUM DISTANCE OF 50 FEET EACH SIDE OF THE FAILURE. DEFICIENT DENSITY OF THE BASE WILL REQUIRE ADDITIONAL COMPACTION A MINIMUM OF 50 FEET EACH SIDE OF FAILURE.
6. BASE PRIMING: ONCE THE BASE IS APPROVED BY THE TESTING LABORATORY, THE CONTRACTOR SHALL AS SOON AS POSSIBLE PRIME AND SAND-SEAL THE BASE. APPROVAL MUST BE OBTAINED FROM THE PROJECT ENGINEER. THIS APPROVAL CAN BE GRANTED ONLY AFTER THE PROJECT ENGINEER RECEIVES THE RESULTS OF THE FIELD MEASUREMENTS AND LABORATORY TESTS DIRECTLY FROM THE INDEPENDENT TESTING LABORATORY.
D. SHOULDER: THE FINISHED SHOULDER AREA IS INTENDED TO BE COMPACTED TO A SMOOTH, FIRM CONDITION THAT CAN ACCOMMODATE VEHICLES WITHOUT RUTS BEING CREATED. IF IN THE OPINION OF THE PROJECT ENGINEER, EXCESS UNSUITABLE MATERIAL HAS BEEN INCORPORATED INTO THE TOP 6 INCHES OF THE SHOULDER, HE MAY REQUIRE THAT STABILIZING MATERIAL BE ADDED AND MIXED TO PRODUCE A FBV OF 60 PSI, AND BE COMPACTED TO A MINIMUM DENSITY OF 95% AS PER AASHTO T-180.
E. TRENCHES FOR UNDERGROUND PIPES OR STRUCTURES: THE FOLLOWING TESTS SHALL BE MADE:
1. PROCTOR: ONE PER MILE OF TRENCH UNLESS THE MATERIAL CHANGES; IF MATERIAL CHANGES ONE PER EACH DIFFERENT SOIL OR MATERIAL ALLOWED FOR BACKFILL.
2. DENSITY: EVERY 200 FEET OUTSIDE AREAS OF VEHICULAR TRAFFIC AND EVERY 10 FEET WHERE THE TRENCH CROSSES AN AREA OF VEHICULAR TRAVEL, INCLUDING DRIVEWAYS. FREQUENCY OF TESTING WILL BE THE SAME FOR EACH LIFT. EACH COMPACTED ONE FOOT DEPTH OF BACKFILL IS A LIFT. TESTING OF DENSITY WILL START WHEN BACKFILL IS 12 INCHES OVER THE TOP OF THE PIPE. TESTS WILL BE DONE WITHIN THE WIDTH OF THE TRENCH AS INDICATED BY THE PROJECT ENGINEER.
3. DENSITY REQUIREMENTS: THE DENSITY REQUIREMENTS ARE THAT:
A. IN AREAS OF PROPOSED OR EXISTING PAVEMENT OR VEHICULAR TRAFFIC ALL BACKFILL, SUB-BASE, AND BASE MATERIAL SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY AS PER AASHTO T-180; AND
B. IN OTHER AREAS NOT UNDER PROPOSED OR EXISTING PAVING OR IN AREAS NOT SUBJECT TO VEHICULAR TRAFFIC, THE BACKFILL SHALL BE COMPACTED TO 90% DENSITY AS PER AASHTO T-180.

SEC. 02.208. TOLERANCES: THE REQUIRED THICKNESSES AND WIDTHS SHALL BE THE ABSOLUTE MINIMUM ALLOWABLE. NO ALLOWANCE WILL BE MADE FOR FAILURE IN A WIDTH OR DEPTH DIMENSION. FLORIDA BEARING VALUE AND DENSITY REQUIREMENTS SHOWN ON THE PLANS AND SPECIFICATIONS ARE THE ABSOLUTE MINIMUM ALLOWABLE AND NO VALUES LESS THAN THOSE SPECIFIED WILL BE ACCEPTED. GRADES ON ROADWAY CENTERLINE AND DITCH INVERTS SHALL BE PLUS OR MINUS 0.05 OF A FOOT FROM PLAN DIMENSIONS.

SEC. 02.209. STABILIZED SUBBASE AND SHOULDERS: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.210. LIMEROCK OR SHELLROCK BASE: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.211. ASPHALT: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, TYPE S ASPHALT CONCRETE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF, TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2000 EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.212. PAVEMENT MARKING: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.213. SIGNS: ALL MATERIALS AND INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, USDOT, FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.214. CULVERTS/STORM SEWERS: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.215. GRASSING: ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION. THE AREAS ON WHICH THE SOD IS TO BE PLACED SHALL CONTAIN SUFFICIENT MOISTURE FOR OPTIMUM RESULTS AFTER BEING PLACED. THE SOD SHALL BE WATERED AND KEPT IN A MOIST CONDITION FOR NO LESS THAN TWO WEEKS (MINIMUM) OR UNTIL THE ENTIRE PROJECT IS ACCEPTED BY THE PROJECT ENGINEER AND THE COUNTY ENGINEER THE MOISTENED CONDITION SHALL EXTEND AT LEAST TO THE FULL DEPTH OF THE ROOTING ZONE. WATER SHALL NOT BE APPLIED, HOWEVER, WHEN THERE IS DANGER OF A FREEZING CONDITION.

SEC. 02.216. STAKED SILT FENCES: ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.217. TEMPORARY PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION: ALL MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.218. FENCING: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.219. GUARDRAIL: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.220. CONCRETE: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.221. FIELD ENGINEERING, SURVEYING AND RIGHT-OF-WAY STAKING:
A. FIELD ENGINEERING AND SURVEYING SERVICES SHALL INCLUDE SURVEY WORK TO ESTABLISH RIGHT-OF-WAY LINES AND LEVELS AND TO LOCATE AND LAY OUT SITE IMPROVEMENTS, STRUCTURES, AND CONTROLLING LINES AND LEVELS REQUIRED FOR THE CONSTRUCTION OF THE WORK. ALSO INCLUDED ARE SUCH ENGINEERING SERVICES AS ARE SPECIFIED OR REQUIRED TO EXECUTE CONTRACTOR'S CONSTRUCTION METHODS. ENGINEERS AND SURVEYORS SHALL BE LICENSED PROFESSIONALS IN THE STATE OF FLORIDA.
B. EXISTING BASIC HORIZONTAL AND VERTICAL CONTROL POINTS FOR THE PROJECT ARE THOSE DESIGNATED ON THE DRAWINGS. CONTRACTOR SHALL LOCATE AND PROTECT CONTROL POINTS PRIOR TO STARTING SITE WORK AND SHALL PRESERVE ALL PERMANENT REFERENCE POINTS DURING CONSTRUCTION. IN WORKING NEAR ANY PERMANENT PROPERTY CORNERS OR REFERENCE MARKERS, CONTRACTOR SHALL USE CARE NOT TO REMOVE OR DISTURB ANY SUCH MARKERS. IN THE EVENT THAT MARKERS MUST BE REMOVED OR ARE DISTURBED DUE TO PROXIMITY OF THE CONSTRUCTION WORK, CONTRACTOR SHALL HAVE THEM REFERENCED AND RESET BY A LAND SURVEYOR QUALIFIED UNDER THE LAWS OF THE STATE OF FLORIDA.
C. CONTRACTOR SHALL LAY OUT THE WORK AT THE LOCATION AND TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. SURVEY NOTES INDICATING THE INFORMATION AND MEASUREMENTS USED IN ESTABLISHING LOCATIONS AND GRADES SHALL BE KEPT IN NOTEBOOKS AND COPIES FURNISHED TO PROJECT ENGINEER AND THE COUNTY ENGINEER. AS A MINIMUM THE FOLLOWING ITEMS WILL BE STAKED:
1. RIGHT-OF-WAY, STAKED AT EACH STATION OR WHEREVER THE RIGHT-OF-WAY CHANGES WIDTH OR DIRECTION, AT ANY OFFSET DESIRED;
2. CUT OR FILL TO CENTERLINE GRADE AND SWALE GRADE AT EACH STATION OR WHEREVER CHANGES OCCUR AT POINTS OF VERTICAL INTERSECTION; AND
3. SET PROPOSED CENTERLINE ELEVATION OF ALL INTERSECTING ROADS ONE TIME AND NOTE THOSE ELEVATIONS IN FIELDBOOK; COMPARE THOSE ELEVATIONS AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE PROJECT ENGINEER.
ALL THE ABOVE MENTIONED SURVEY WORK WILL BE DONE BY A SURVEYOR LICENSED TO PRACTICE IN THE STATE OF FLORIDA.

SEC. 02.222. OBSTRUCTIONS IN RIGHT-OF-WAY:
A. HEADWALLS, FENCES, MAIL BOXES, STATUES, WALKWAYS, AND OTHER OBSTRUCTIONS PLACED IN THE RIGHT-OF-WAY WILL BE REMOVED FROM THE WORK AREA, AS REQUIRED TO KEEP THE WORK PROGRESSING, BY THE CONTRACTOR. IN THE EVENT THAT THE OWNER CANNOT BE IDENTIFIED OR IS UNABLE OR UNWILLING TO REMOVE SAID OBSTRUCTIONS THEMSELVES, THE OBSTRUCTION WILL BE POSTED WITH A NOTICE, IN WRITING, BY THE CONTRACTOR 24 HOURS PRIOR TO ANY REMOVAL, THAT SAID OBJECT WILL BE REMOVED. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR ANY DAMAGE TO SAID OBJECTS THAT OCCURS WHILE BEING MOVED BY THE CONTRACTOR, AFTER PROPER NOTIFICATION AND THE APPROVAL OF THE PROJECT ENGINEER. ANY OBJECTS THAT ARE REMOVED FROM WITHIN THE RIGHT-OF-WAY, EXCEPT MAILBOXES, WILL BE HAULED AWAY AND DISPOSED OF BY THE CONTRACTOR IN A PROPER LANDFILL.
B. MAILBOXES MOVED DURING CONSTRUCTION, WILL BE REPLACED AT A LOCATION 3 FEET FROM THE EDGE OF PAVEMENT BY THE CONTRACTOR, PROVIDING THE SUPPORT POLE IS WOOD AND LESS THAN 4 INCHES IN DIAMETER OR IS A BREAKAWAY TYPE POLE. IF THE ORIGINAL SUPPORT POLE IS DAMAGED OR UNSATISFACTORY, THE CONTRACTOR WILL NOT BE REQUIRED TO REPLACE OR RELOCATE THE MAILBOX.

SEC. 02.223. SHOP DRAWING SUBMITTALS: THE FOLLOWING INFORMATION AND/OR DRAWINGS SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO BEGINNING WORK:
A. INFORMATION ON THE PIPE AND CULVERTS, INDICATING THE TYPE, CLASS, SIZE, AND OTHER RELEVANT INFORMATION;
B. ASPHALT MIX DESIGN;
C. DOCUMENTATION ON ALL OTHER MATERIALS USED INCLUDING, BUT NOT LIMITED TO, FILTER FABRIC, GUARDRAILS, CONCRETE, STEEL POSTS, CURING COMPOUND, AND JOINT MATERIAL;
D. SAMPLE OF TAG FOR WRITTEN NOTIFICATION OF OWNERS; AND
E. TRAFFIC PLAN (A DRAWING TO SCALE OF EACH PHASE SHOWING ALL BARRICADES, SIGNS AND FLAGMEN IS REQUIRED).

FENCING SPECIFICATIONS:
CHAIN LINK
Material Specifications
1. Fence fabric: Six foot heights, knuckled top and bottom, 9 gauge steel with galvanized coating.
2. Posts: Intermediate line posts:
Six foot high runs shall use 2" O.D. posts. All posts schedule SS40 galvanized.
Terminal and corner posts:
Six foot high runs shall use 3" posts, all posts to be no less than schedule SS40 galvanized.
3. Top Rail: 1 5/8" O.D. schedule SS40 galvanized pipe.
4. Tension Bars: Minimum 3/16" x 5/8" flat galvanized metal to be provided at each end, corner and gate post. Lengths to match fabric heights.
5. Tension Wire: Tension wire of 7 gauge galvanized spring coil to be used on bottom of fence. Use hog rings to attach to bottom of fabric at 24" O.C.
6. Tension Bands: Minimum ¾" width x 14 gauge bands, galvanized after fabrication. Each band installed with a 5/16" x 1 ¼" galvanized carriage bolts and nuts. Minimum bands required is one less than height of fabric with each tension bar, i.e. 5 to be used at 6' applications.
7. Sleeves: For top rail couplings, minimum length of 6" galvanized steel. May be inside or outside type.
8. Caps: Pressed steel or malleable, may be dome or flat type, to be installed on all end, corner and gate posts.
9. Loop Caps: Pressed steel or malleable, galvanized, to be provided on all line posts.
10. Sockets (Rail ends): Pressed steel or malleable, galvanized, to be used with brace bands for bracing of top rail.
11. Ties: Tie wires of aluminum to be 9 gauge. To be used as fabric ties on line posts, fabric ties along top rail and could be used to tie bottom tension wire. All ties to be installed so wires cannot be untied by fingers alone and all ends of the twisted wire shall face down. Steel ties may be used with prior permission.
12. Gates: All gates shall be furnished and installed with similar specification as fence material, be of proper design and pipe size bracing for the size gate specified. SS20 galvanized piping can be used on the gate frames. Each gate provided will include not only the gate, but also the gate and latch posts specified below, two industrial galvanized hinges, allowing nearly a 180 degree swing and one appropriately sized latch fork and drop rod. All swing gates will receive the installation of a duckbill gate keeper to hold each respective gate open.
1. Six foot x four foot (6'x4') swing, 3" O.D. gate posts (2)
2. Six foot x five foot (6'x5') swing, 3" O.D. gate posts (2)
3. Five foot x four foot (5' x 4') swing, 2" O.D. gate posts (2)

MINIMUM INSTALLATION REQUIREMENTS
1. Intermediate line posts shall be placed not more than ten (10) feet apart, plumb and in a vertical position. All posts shall be set in concrete four times the diameter of the post to a depth no less than twenty-one (21) inches.
2. All end, corner, terminal and gateposts shall be plumb and vertical. Posts shall be set in concrete four times the diameter of the posts at a depth no less than thirty-three (33) inches, deeper if application dictates it.
3. Any change in directions of fifteen (15) degree shall transition from a corner post with the fabric independently stretched.
4. The fabric shall be stretched tight from terminal posts. The fabric shall be fastened to line posts by ties spaced approximately fifteen (15) inches apart. It shall be fastened to top rails by ties spaced approximately twenty-four (24) inches apart. The fabric shall be placed outside of the line posts. It shall be cut and fastened to each terminal post independently by tension bars with bands spaced per specifications, the same being true for bottom tension wire. **Fabric shall be installed to be no more than 2" above the ground.**
5. Concrete used to secure posts shall be at least 2500 psi. Posts shall extend approximately three (3) inches below the bottom of the concrete to allow condensation to dissipate from within the post.
6. The contractor shall be responsible for securing the work area for any materials, which could be used as projectiles, or for vandalism.

DATE	REMARK	DR	CH
06-29-23	ORIGINAL SUBMITTAL	DRJ	RDP
07-28-23	STOCKPILE LOCATIONS REV.	DRJ	RDP

BID SET

CERTIFICATE OF AUTHORIZATION # 5684
ROGER DALE POLSTON P. E. # 33222
MARVIN LUTHER WOLFE P.E. # 46030

PE Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD., SEBRING, FLORIDA 33870
863-385-5564 PHONE -- 863-385-2462 FAX

ENGINEER JOB #
01149

CITY OF SEBRING
CEMETERY ROAD WWTP
PERCOLATION POND ADDITIONS
CONSTRUCTION SPECIFICATIONS

DRAWING SCALE
1" = 200'

SHEET
C4 OF C4