



REPLY TO
ATTENTION OF

Regulatory Division
West Permits Branch
Fort Myers Permits Section

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
FORT MYERS REGULATORY OFFICE
1520 ROYAL PALM SQUARE BLVD., SUITE 310
FORT MYERS, FLORIDA 33908

October 7, 2019

PUBLIC NOTICE

Permit Application Number SAJ-2019-03104 (IP-SJF)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) as described below:

APPLICANT: 10801 Metro, LLC
c/o Greg Truxton
6810 International Center Boulevard
Fort Myers, Florida 33912

WATERWAY AND LOCATION: The project would affect forested freshwater wetlands and other surface waters associated with the Estero Bay watershed. The project site is located at 10801 Metro Parkway in Section 6, Township 45 South, and Range 25 East, Fort Myers, Lee County, Florida 33966. Parcel ID (06-45-25-00-00008-0000).

Directions to the site are as follows: From Colonial Boulevard travel to Metro Parkway, head south on Metro Parkway to site address 10801 Metro Parkway.

APPROXIMATE CENTRAL COORDINATES: Latitude 26.585505 °
Longitude - 81.850425 °

PROJECT PURPOSE:

Basic: The basic project purpose is for a commercial/industrial development.

Overall: To construct a commercial/industrial development with stormwater management system, infrastructure and amenities in Lee County, Florida.

EXISTING CONDITIONS: The project site is currently forested and encompasses approximately 28.26 acres, of which 20.02 acres are jurisdictional wetlands and 0.49 acres other waters of the U.S., located west and immediately adjacent to, the intersection of Metro Parkway and Landing View Road. The project site is bounded by undeveloped land to the north, Metro Parkway to the west, commercial properties to the south, and Plantation Road to the east.

All wetland habitats onsite have exotic invasive species and have been affected by past hurricane activity. Several downed trees, due to hurricane damage, and extensive

coverage by nuisance/exotic vines occur on site. Although one wetland was identified on the site, the forested system is comprised of differing FLUCFCS depending on the level of nuisance and exotic species coverage. Therefore, each FLUCFCS is described below:

Cypress, Disturbed (25-49% Exotics) (FLUCFCS 6219 E2, 0.33 acre)

This habitat type occurs in the northern portion of the site at the property boundary. The canopy vegetation is dominated by bald cypress (*Taxodium distichum*). Additional species observed in the canopy include the exotic punk tree (*Melaleuca quinquenervia*), the exotic java plum (*Syzygium cumini*), and the exotic Brazilian pepper (*Schinus terebinthifolia*). Groundcover included swamp fern (*Telmatoblechnum serrulatum*). The exotic old-world climbing fern (*Lygodium microphyllum*) was observed in this habitat. The cover of old-world climbing fern is high in areas of this habitat.

Cypress, Disturbed (50-75% Exotics) (FLUCFCS 6219 E3, 0.57 acre)

This habitat occurs in the northwestern portion of the site. This habitat is like the Cypress habitat described above, with the exception that exotic coverage is much higher. This habitat contains a higher cover of both punk tree and old-world climbing fern.

Cypress-Oak, Disturbed (25-49% Exotics) (FLUCFCS 6309 E2, 1.24 acre)

This habitat occurs on the western portion of the site. This habitat contains a mixture of bald cypress and laurel oak (*Quercus laurifolia*). The canopy also includes cabbage palm (*Sabal palmetto*), punk tree, and Brazilian pepper. Patchy groundcover is mixture of swamp fern and royal fern (*Osmunda regalis* L. var. *spectabilis*). Sporadic old-world climbing fern was also observed in this habitat.

Cypress-Oak, Disturbed (50-75% Exotics) (FLUCFCS 6309 E3, 1.80 acre)

This habitat is like the cypress-oak habitat described above with the exception that punk tree is much denser. This habitat fringes the eastern boundary of the wetland core.

Cypress-Oak, Disturbed (76-100% Exotics) (FLUCFCS 6309 E4, 1.22 acre)

This is another cypress-oak habitat that contains a higher percent cover of old-world climbing fern. The coverage of old-world climbing fern is locally dense, creating vegetative mats that cover other vegetation.

Wetland Scrub (0-24% Exotics) (FLUCFCS 6319 E1, 3.76 acre)

This habitat comprises the core of the wetland. Vegetation observed included a dense cover of Carolina willow (*Salix caroliniana*) and Brazilian pepper. Additional vegetation observed in this habitat included punk tree and buttonbush (*Cephalanthus occidentalis*).

Exotic Wetland Hardwoods (FLUCFCS 619, 11.10 acre)

This habitat type comprises the largest wetland habitat found on the site. The canopy is dominated by punk tree. Additional canopy species observed included slash pine (*Pinus elliottii*), Australian pine (*Casuarina equisetifolia*), earleaf acacia (*Acacia auriculiformis*), cabbage palm, and sporadic bald cypress. Myrsine (*Myrsine cubana*) and cocoplum

(*Chrysobalanus icaco*) are located in the shrub stratum. Groundcover includes swamp fern and shield fern (*Thelypteris dentata*). Some coverage of old-world climbing fern was also noted.

Ditches (FLUCFCS 513; 0.49 acres)

One ditch was identified occurring on the eastern side of the property along the FPL easement. This ditch appears to retain stormwater from the adjacent sidewalk and roadway.

Approximately 28% (7.75 acres) of the site is considered uplands, the majority of which is disturbed pine flatwoods habitat:

Pine Flatwoods, Disturbed 50-75% Exotics (FLUCFCS 4119E3; 1.69 acres)

Native vegetation within the canopy of this habitat includes slash pine, cabbage palm, and scattered laurel oak. Native groundcover includes saw palmetto (*Serenoa repens*). This habitat type also contains a high vegetative cover of punk tree, scattered Australian pine, scattered earleaf acacia, and scattered Brazilian pepper.

Pine Flatwoods, Disturbed 76-100% Exotics (FLUCFCS 4119E4; 3.02 acres)

This habitat contains native vegetation like the pine flatwoods habitat described above. This habitat type contains a higher percent cover of nuisance and exotic vegetation, predominantly punk tree, particularly in the canopy.

Brazilian Pepper (FLUCFCS 422, 0.92 acre)

This habitat is located on the southeast portion of the site. This habitat is comprised of a dense canopy of Brazilian pepper on spoil mounds. Additional species in the canopy include slash pine, cabbage palm, and earleaf acacia. Groundcover includes saw palmetto and cogon grass (*Imperata cylindrica*).

Melaleuca (FLUCFCS 424, 0.87 acre)

This habitat occurs in the northern central portion of the site. The canopy and subcanopy are dominated by punk tree. Additional species observed included slash pine, saw palmetto, Brazilian pepper, and myrsine.

Disturbed Land (FLUCFCS 740, 0.02 acre)

A small portion of disturbed land habitat occurs on the northwest portion of the site. This habitat is comprised of outcrops of limestone with predominately exotic vegetation.

Spoil Areas (FLUCFCS 743, 0.33 acre)

This habitat occurs in the eastern portion of the site and is comprised of vegetation growing on spoil. Vegetation observed included Australian pine, slash pine, cabbage palm, Brazilian pepper, and saw palmetto.

Roadway (FLUCFCS 814, 0.90 acre)

This habitat occurs on the eastern portion of the site and is comprised of an FPL easement and sidewalk associated with Plantation Road.

PROPOSED WORK: The applicant seeks authorization to discharge 2,324 cubic yards of clean fill within 0.02 acres of other waters of the U.S. and 10.80 acres of freshwater forested wetlands and to excavate 23,180 cubic yards of material from 1.50 acres of freshwater forested wetlands, in order to construct five (5) industrial/manufacturing buildings (192,545 SF), along with associated parking area, utility infrastructure, stormwater management system, landscaping and irrigation system and preserve.

AVOIDANCE AND MINIMIZATION INFORMATION – The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

The Consultant has reviewed the site plan to determine if plan modifications could be made to preserve wetlands on the property. The applicant has implemented practical design modifications to reduce adverse impacts to the wetland functions provided by the higher quality wetlands and focusing unavoidable impacts to lower quality wetlands.

COMPENSATORY MITIGATION – The applicant has offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

To offset anticipated impacts to 12.30 acres of wetlands, the applicant has proposed the purchase of the 4.18 forested mitigation bank credits from a Federally-approved mitigation bank within the service area of the proposed project.

CULTURAL RESOURCES:

The Corps is not aware of any known historic properties within the permit area. By copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

ENDANGERED SPECIES:

1) The Corps has determined the proposed project may affect, but is not likely to adversely affect the Eastern indigo snake (*Drymarchon corais couperi*). Based on the Eastern Indigo Snake Effect Determination Key (dated August 1, 2017), the Corps determination sequence resulted in A > B > C > D > NLAA. The Permittee agrees to use the Standard Protection Measures for the Eastern Indigo Snake (dated August 12, 2013). The Corps has U.S. Fish and Wildlife Service concurrence for the proposed activities through use of the aforementioned determination keys.

2) The Corps has determined the project may affect, but is not likely to adversely affect the wood stork (*Mycteria americana*). The Corps received FWS concurrence letter, dated May 18, 2010 (amended on August 13, 2013) for all work that results in a “may affect,

not likely to adversely affect” determination using the Wood Stork Effect Determination Key. The project proposes less than 50 acres of wetland impacts and the applicant will provide the required short/long hydroperiod compensation through the purchase of federal credits at a mitigation bank within the service area. The Corps has programmatic concurrence with the sequential determination of A > B > C > E> “NLAA” pursuant to the Key.

3) The Corps has determined the project may affect the Florida bonneted bat (*Eumops floridanus*). The project is located within the consultation area of the FBB. Furthermore, the project site is 5 ac or greater and includes more than 1 ac (alone or combined) of the following FBB habitat types: upland or wetland forest; upland or wetland shrub; or open freshwater wetlands. The Corps will request initiation of formal consultation with the FWS pursuant to Section 7 of the Endangered Species Act by separate letter.

4) The Corps has determined the proposed project may affect, but is not likely to adversely affect the Florida scrub-jay (*Aphelocoma coerulescens*). The proposed project is within the consultation area for the Florida scrub-jay. No critical or foraging habitat types utilized by Florida scrub-jays are found within or adjacent to the project area. The Corps will request U.S. Fish and Wildlife concurrence with this determination pursuant to Section 7 of the Endangered Species Act.

5) The Corps has determined the proposed project may affect, but is not likely to adversely affect the red-cockaded woodpecker (RCW) (*Picoides borealis*). Although the project occurs within the Consultation Area of the endangered RCW, the habitats found on the proposed project area are not suitable for the RCW and there is limited open areas for foraging and nest tree development. In addition, there are no documented active RCW colonies within or adjacent to the project area. The Corps will request U.S. Fish and Wildlife Service concurrence with this determination pursuant to Section 7 of the Endangered Species Act.

6) The Corps has determined the proposed project may affect, but is not likely to adversely affect the Everglades snail kite (*Rostrhamus sociabilis plumbeus*) or its designated critical habitat. The proposed project is within the consultation area for the snail kite. No habitat types utilized by the Everglades snail kite are found within or adjacent to the project area. The Corps will request U.S. Fish and Wildlife concurrence with this determination pursuant to Section 7 of the Endangered Species Act.

The U.S. Army Corps of Engineers has determined the proposal will not affect any other threatened or endangered species or designated critical habitat other than the ones listed above.

ESSENTIAL FISH HABITAT (EFH): This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in the project area of reference. Our final determination relative to project

impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The jurisdictional line has been verified by Corps personnel.

AUTHORIZATION FROM OTHER AGENCIES: Water Quality Certification may be required from the Florida Department of Environmental Protection and/or one of the state Water Management Districts.

COMMENTS regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Fort Myers Permits Section, 1520 Royal Palm Square Blvd., Suite 310, Fort Myers, FL 33919 within 21 days from the date of this notice.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.

QUESTIONS concerning this application should be directed to the project manager, Stephen J. Fleming, in writing at the Fort Myers Permits Section, 1520 Royal Palm Square Blvd. Suite 310, Fort Myers, FL 33919; by electronic mail at Stephen.J.Fleming@usace.army.mil; by facsimile transmission at (239) 334-0797; or, by telephone at (239) 334-1975.

IMPACT ON NATURAL RESOURCES: Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in

general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the Coastal Zone Management Plan.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

ENVIRONMENTAL RESOURCE PERMIT PLANS
FOR

METRO 28

PART OF SECTION 6, TOWNSHIP 45 SOUTH, RANGE 25 EAST
FORT MYERS, LEE COUNTY, FLORIDA

PROJECT DATA

SITE ADDRESS	PROJECT DATUM
10801 METRO PKWY. FORT MYERS, FL 33966	STATE PLANE FLORIDA WEST ZONE NAD1983 (NSRS 2007) NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 (CONVERSION: NGVD - 1.15' = NAVD)
ZONING	RECORD PLAT
4000 (INDUSTRIAL, VACANT)	N/A
FLOOD ZONE	STRAP NUMBERS
ACCORDING TO F.I.R.M. NO. 12071C0428G, MAP REVISED : DECEMBER 8, 2018, THE PROPERTY IS LOCATED IN: ZONE "AE" (EL. 15.5), ZONE "AE" (EL. 16), AND ZONE "X"	06-45-25-00-00008.0000

PERMIT REQUIREMENTS

AGENCY	STATUS	NOTES
S. FLORIDA WATER MANAGEMENT DISTRICT	PENDING	-
LEE COUNTY DEVELOPMENT ORDER	N/A	-
FLORIDA DEPARTMENT OF HEALTH	N/A	-
FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION	N/A	-
F.D.O.T. CONNECTION PERMIT	N/A	-
F.D.O.T. DRAINAGE CONNECTION PERMIT	N/A	-
F.D.O.T. UTILITY PERMIT	N/A	-
ARMY CORPS OF ENGINEERS	N/A	-
F.D.E.P. NOTICE OF INTENT	N/A	-

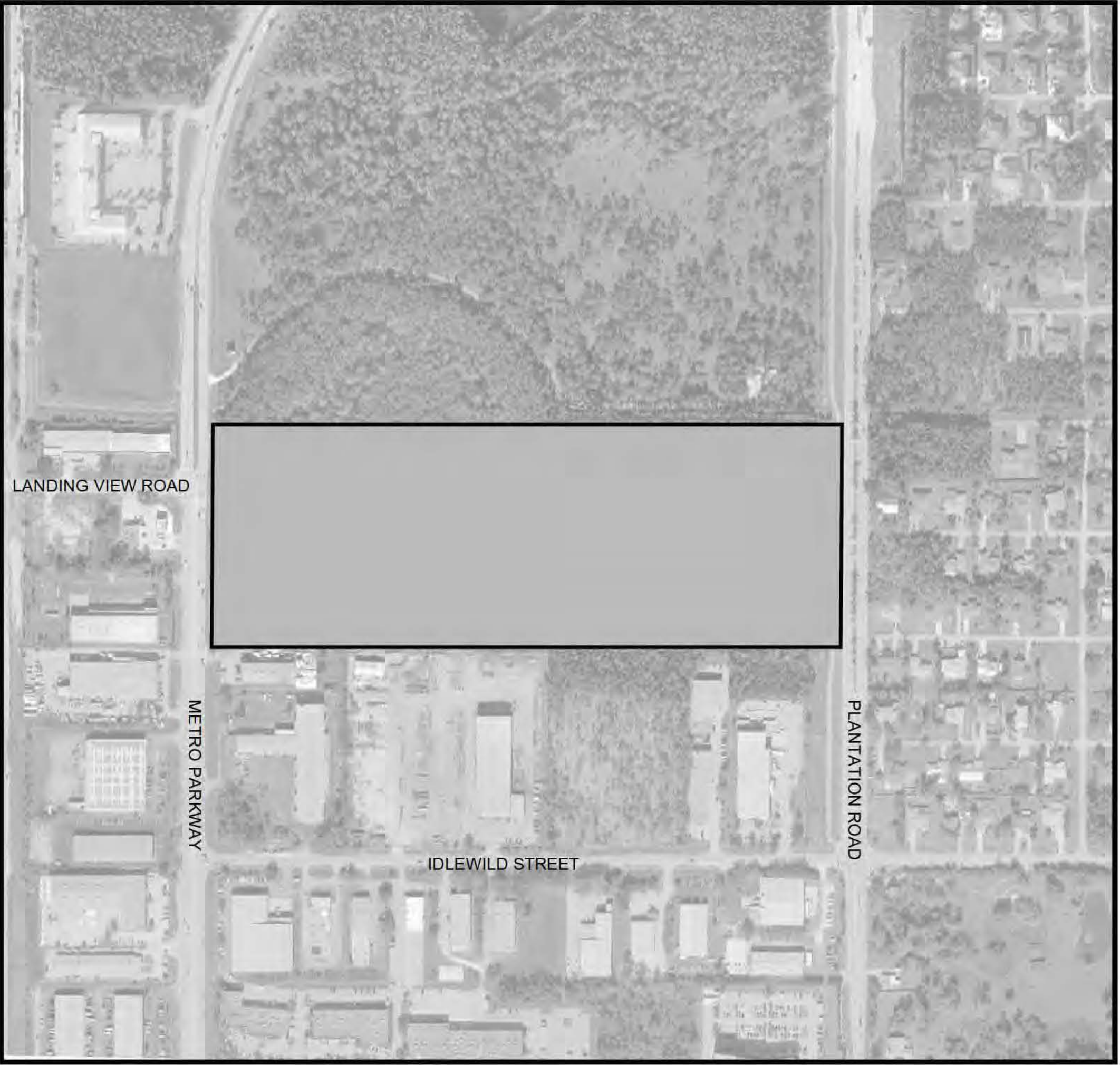
NOTE: CONTRACTOR MUST OBTAIN AND KEEP ON FILE A COPY OF ALL PERMITS
REQUIRED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY

DESIGN TEAM

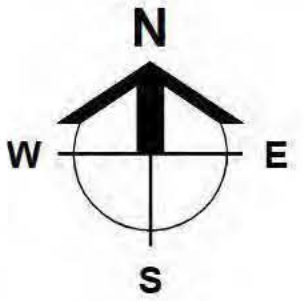
PROJECT ENGINEER	PROJECT MANAGEMENT
CARL A. BARRACO, P.E.	STEVE COLEMAN
DESIGN ENGINEER	PROJECT SURVEYOR
JEFF WASKO, E.I.	SCOTT A. WHEELER, PSM
LEAD DESIGN TECHNICIAN	SITE PLANNING
JEFF WASKO, E.I.	JENNIFER SAPEN, AICP
DESIGN STAFF	LAND PLANNING
CHRISTOPHER PAULY VINNIE BARRACO JR., E.I.	JENNIFER SAPEN, AICP
QUALITY CONTROL	RECORD DRAWINGS
TIM GAVIN, P.E.	PENDING

THESE PLANS MAY HAVE BEEN MODIFIED IN SIZE BY REPRODUCTION.
THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

ALL DIMENSIONS ARE IN FEET.



PROJECT
LOCATION



LOCATION MAP



INDEX OF DRAWINGS

SHEET	DESCRIPTION	XREF	DRAWING NAME
C1.0	COVER SHEET AND LOCATION MAP	-	23610A00.DWG
C2.0	STANDARD NOTES, LEGEND, AND ABBREVIATIONS	-	23610A02.DWG
C3.0	AERIAL PHOTOGRAPH AND EXISTING CONDITIONS	A	23610A06.DWG
C4.0	MASTER SITE AND DRAINAGE PLANS	A	23610A11.DWG
C5.0-C5.1	DETAILED PAVING, GRADING, AND DRAINAGE PLANS	A	23610A15.DWG
C6.0-C6.2	TYPICAL SECTIONS AND DETAILS	-	23610A18.DWG
C7.0	EROSION CONTROL DETAILS	-	23610A50.DWG
C8.0	STORMWATER POLLUTION PREVENTION PLAN	A	23610A52.DWG

CROSS-REFERENCED DRAWINGS:

XREF	DESCRIPTION	DRAWING NAME
A	BASE LINEWORK PLAN	23610A00.DWG

APPROVAL SUBMITTAL PLANS
10/01/2019

Barraco
and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING

www.barraco.net
2271 MCGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169

FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Land
Solutions
inc.

6810 INTERNATIONAL CENTER BLVD.
FORT MYERS, FL 33912

PHONE (239) 482-1500
FAX (239) 481-8477

WWW.LANDSOLUTIONS.NET

PROJECT DESCRIPTION

METRO
28

LEE COUNTY, FLORIDA

ENGINEER OF RECORD
CARL A. BARRACO, P.E., FOR THE FIRM
FLORIDA P.E. NO. 38536 - CARLB@BARRACO.NET

DRAWING NOT VALID WITHOUT SEAL, SIGNATURE AND DATE
© COPYRIGHT 2019, BARRACO AND ASSOCIATES, INC.
REPRODUCTION, CHANGES OR ASSIGNMENTS ARE PROHIBITED

F.I.E. NAME J23610A01.DWG
LOCATION J:\23610\DWG\IERP
PLOT DATE FRI 10-4-2019 - 9 38 AM
PLOT BY CHRIS PAULY

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS











































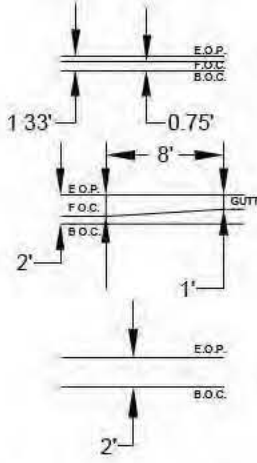
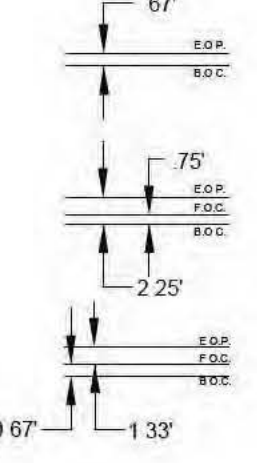
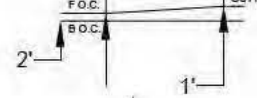
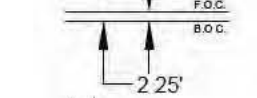
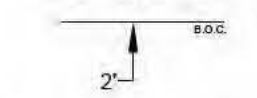
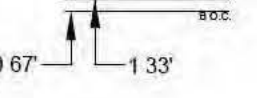

















































APPROVAL SUBMITTAL PLANS
10/01/2019

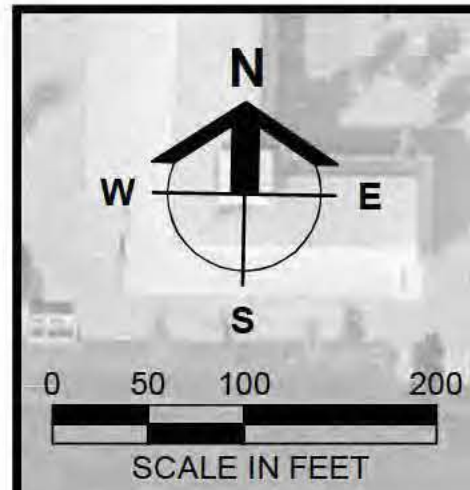
COVER SHEET
AND
LOCATION MAP

PROJECT / F.I.E. NO.	SHEET NUMBER
23610	C1.0

STANDARD ABBREVIATIONS									
NOTE: SEE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS INDEX 001 FOR ADDITIONAL ABBREVIATIONS NOT LISTED BELOW.									
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	CULV.	CULVERT	FIN.	F INSH	M.H.W.	MEAN HIGH WATER	REL.	RELOCATED
ABD.	ABANDONED	C.Y.	CUBIC YARD	F.L.	FLORIDA	M.	MILE	REM.	REMOVED
A.C.A.	AMERICANS WITH DISABILITIES ACT	CYL.	CYLINDRICAL	FLEX.	FLEXIBLE	MIN.	MINIMUM	REQ.	REQUIRED
ADJ.	ADJUST	D.A.	DEGREE OF CURVATURE	F.M.	FORCE MAIN	MISC.	MISCELLANEOUS	RES.	RESIDENCE
A.D.T.	AVERAGE DAILY TRAFFIC	D.B.	DEED	F.O.C.	FACE OF CURB	M.L.W.	MEAN LOW WATER	R.M.	REFERENCE MONUMENT
A.E.	ACCESS EASEMENT	D.B.L.	DITCH BOTTOM NILET	F.P.S.	FEET PER SECOND	MM.	MILL METER	R.P.M.	RAISED REFLECTIVE PAVEMENT MARKERS
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC	D.B.L.	DOUBLE	FRAC.	FRACTION	MOD.	MODIFY OR MODIFIED	MON.	MONUMENT
AGG.	AGGREGATE	D.C.S.	DEGREE OF CURVATURE (SP RAL)	FREQ.	FREQUENCY	M.O.T.	MAINTENANCE OF TRAFFIC PREVENTION DEVICE	M.P.H.	MILES PER HOUR
A.I.C.P.	AMERICAN INSTITUTE OF CERTIFIED PLANNERS	D.C.V.	DOUBLE DETECTOR CHECK VALVE	FT.	FOOT OR FEET	M.S.L.	MEAN SEA LEVEL	M.U.T.C.A.	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
ALT.	ALTERNATE	D.E.	DRAINAGE EASEMENT	FURN.	FURNISH	N.	NORTH	NA	NOT APPLICABLE
ALUM.	ALUMINUM	DECE.	DECELERATION	G.	GRAM	NE.	NORTHEAST	SE.	SOUTHEAST
A.M.	12:00 M. MIDNIGHT UNTIL 11:59 NOON	DEMOBL.	DEMOLITION	GAL.	GALLON	SAN.	SANITARY	SCH.	SCHEDULE
A.N.S.I.	AMERICAN NATIONAL STANDARDS INSTITUTE	DEN.	DENSITY	GA.	GAUGE OR GAGE	SH.	SHOULDER	SEC.	SECTION
APPL.	APPLICATION	DEPT.	DEPARTMENT	GR.	GROSS MILE	SG.	SPECIFIC GRAVITY	SED.	SEDIMENT
ASPH.	ASPHALT	D.H.W.	DESIGN HIGH WATER	GRND.	GROUND	NAV.	NATIONAL AMERICAN VERTICAL DATUM OF 1988	SH.	SHEET
ASSY.	ASSEMBLY	DIA.	DIAMETER	GV.	GATE VALVE	N.G.S.	NATIONAL GEODETIC SURVEY	SHLDR.	SHOULDER
A.S.T.M.	AMERICAN SOCIETY FOR TESTING MATERIALS	D.I.P.	DUCTILE IRON PIPE	H.	HEIGHT	N.G.W.	NORMAL HIGH WATER	S.F.	SQUARE FOOT
AUX.	AUXILIARY	D.R.	DIRECTION	H.D.	HIGH DENSITY	N.T.S.	NOT TO SCALE	S.R.	STATE ROAD
AVE.	AVENUE	D.S.	DESIGN SPEED	H.D.R.	HIGH DENSITY ROAD	N.W.	NORTH WEST	S.T.	STREET
AVG.	AVERAGE	D.S.W.T.	DRY SEASON WATER TABLE	H.P.	HIGH PRESSURE OR HORSE POWER	N.W.	NORTH WEST	STA.	STATION
B.E.	BURIED ELECTRIC	D.W.G.	DRAWING	H.W.	HIGH WATER	O.E.	OVERHEAD ELECTRIC	STAB.	STABILITY OR STABILIZATION
B.L.	BOULEVARD	E.	EACH	H.WY.	HIGHWAY	OPT.	OPTIONAL	STD.	STANDARD
B.M.	BENCHMARK	E.A.	EACH	H.YD.	HYDRANT	O.R.L.	OFFICIAL RECORD BOOK	STR.	STRUCTURE
B.O.C.	BACK OF CURB	E.R.	EACH RATE OF SUPER ELEVATION	I.D.	INSIDE DIAMETER	OZ.	OUNCE	S.W.	SOUTHWEST
BOT.	BOTTOM	E.D.	EACH DAY	I.E.	INVERT ELEVATION	P.	PI	S.W.	SIDEWALK
B.F.	BORROW PIT	E.I.	ENGINEERING INTERN	I.N.	INCORPORATED	P.AVT.	POINT OF CURVATURE	S.W.	SOUTHWEST
BR.	BRIDGE	E.L.	ELEVATION	I.N.C.	INCORPORATED	P.C.	POINT OF CURVATURE	S.W.	SOUTHWEST
BRG.	BEARING	E.L.	ELEVATION	I.N.C.	INCORPORATED	P.E.	PROFESSIONAL ENGINEER	TAN.	TANGENT
B.T.	BURIED TELEPHONE	E.L.	ELEVATION	I.N.C.	INCORPORATED	P.E.D.	PEDESTRIAN OR PEDESTAL	TWP.	TOWNSHIP
BTWN.	BETWEEN	EMBK.	EMBANKMENT	I.N.C.	INCORPORATED	P.G.L.	PROFILE GRADE LINE	T.B.D.	TO BE DETERMINED
B.W.	BARBED WIRE	ENCL.	ENCLOSURE	I.N.C.	INCORPORATED	P.I.E.	PRIVATE IRRIGATION EASEMENT	T.B.R.	TO BE REMOVED
CALC.	CALCULATED	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.I.V.	PRIVATE IRRIGATION VALVE	TEL.	TELEPHONE
C.	CALCULATED	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CAP.	CAPACITY	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CATV.	CABLE TELEVISION	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.B.	CONCRETE BOX CULVERT	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CBS.	CONCRETE BOX STRUCTURE	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.C.	CENTER TO CENTER	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CCMB.	COUNTY COMMISSIONERS MINUTES CENTER	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CEM.	CEMENT	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.F.	CUBIC FOOT	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.I.	CAST IRON	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.I.P.	CAST IRON PIPE	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CL.	CENTER LINE	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CONC.	CONCRETE	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.M.	CONCRETE MONUMENT	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.M.P.	CORRUGATED METAL PIPE	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CO.	COUNTY OR COMPANY	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CO.	CLEANOUT	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
COL.	COLUMN	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
COM.	COMMERCIAL	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CONST.	CONSTRUCTION	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CONTR.	CONTRACTOR	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
COORD.	COORDINATE	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
COR.	CORNER	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.P.	CONTROL POINT	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.R.	CONTROL RADIUS	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.S.	CONTROL STRUCTURE	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
CTR.	CENTER	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY
C.U.E.	COUNTY UTILITY EASEMENT	E.O.P.	EDGE OF PAVEMENT	I.N.C.	INCORPORATED	P.H.	PROFESSIONAL HIGHWAY	TEMP.	TEMPORARY

GENERAL NOTES					
NOTE: SEE ADDITIONAL NOTES ON SITE DEVELOPMENT PLANS AND DETAIL SHEETS WHICH ARE SPECIFIC TO THIS PROJECT. IN THE EVENT OF A CONFLICT, UTILIZE NOTES ON SITE DEVELOPMENT PLANS.					
1.	THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE LATEST EDITIONS OF THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, F.D.O.T. DESIGN STANDARDS AND APPLICABLE DESIGN STANDARDS MODIFICATIONS FOUND AT http://www.dot.state.fl.us/design AND ALL LOCAL CODES.	16.	SWALE ELEVATIONS SHOWN ARE TO TOP OF SOD. CONTRACTOR TO ADJUST SWALE GRADE ACCORDINGLY. ALL UNPAVED AREAS SHALL BE GRADED TO DRAIN TO THE DRAINAGE SYSTEM TO PREVENT STANDING WATER. YARD DRAINS MAY BE ADDED IN GREEN AREAS AS NECESSARY AT THE DISCRETION OF THE LANDSCAPE ARCHITECT OR ENGINEER, AND SHALL HAVE PEDESTRIAN-SAFE GRATES MEETING THE REQUIREMENTS OF H-20 LOAD NG.	31.	ALL GRAVITY SEWER MAINS SHALL BE TESTED WITH A MANHOLE WITH A DIAMETER OF NOT LESS THAN 95% OF THE INSIDE PIPE DIAMETER. MANHOLE TESTS MUST BE PERFORMED WITHOUT USE OF MECHANICAL PULLING DEVICES.
2.	ALL APPROVALS REQUIRED IN CONJUNCTION WITH THESE NOTES MUST BE OBTAINED IN WRITING BY THE CONTRACTOR. ANY CHANGES TO THE PLANS AND/OR SPECIFICATIONS MUST BE APPROVED IN ADVANCE BY THE OWNER, ENGINEER AND APPROPRIATE REGULATORY AGENCY.	17.	BERM ELEVATIONS SHOWN ARE THE MINIMUM REQUIRED. CONTRACTOR MAY EXCEED THE MINIMUM BERM ELEVATION BY UP TO 0.5 FEET PROVIDED ALL SLOPE CRITERIA IS MET. ANY CONSTRUCTION OF BERMS IN EXCESS OF THAT LIMIT MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.	32.	NO VEGETATION OR OTHER OBSTRUCTIONS SHALL BE PLACED SO AS TO BLOCK ACCESS OR LINE OF SIGHT TO FIRE HYDRANTS, F.D.O.C., P.I.V., ETC. IN ACCORDANCE WITH LOCAL FIRE JURISDICTION AND/OR AS SHOWN IN DETAILS.
3.	CONTRACTOR SHALL ENSURE THAT ALL PERMITS ARE IN PLACE PRIOR TO CONSTRUCTION, THAT COPIES OF ALL PERMITS ARE RETAINED ON SITE AT ALL TIMES AND SHALL ADHERE TO ALL PERMIT CONDITIONS. AT LEAST 72 HOURS PRIOR TO CONSTRUCTION CONTRACTOR SHALL NOTIFY THE LOCAL MAINTENANCE ENGINEER'S OFFICE TO SECURE GENERAL USE PERMITS AND / OR OTHER PERMITS REQUIRED FOR WORK WITHIN F.D.O.T. RIGHT-OF-WAY.	18.	THE CONTRACTOR SHALL NOT FRY THE END NEAR WITHIN ONE WEEK OF COMPLETION OF DRAINAGE CONTROL STRUCTURES SO THAT ELEVATIONS MAY BE VERIFIED PRIOR TO COMPLETION OF CONSTRUCTION.	33.	ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA FIRE CODE. SEPARATE PERMITS MAY BE REQUIRED FOR ANY DEDICATED FIRE LINE. UNDERGROUND FIRE LINES MUST MEET THE REQUIREMENT OF NFPA 24. CONTRACTOR TO VERIFY FIRE LINE SIZE WITH BUILDING PLANS PRIOR TO CONST.
4.	ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST VERSIONS OF THE AMERICANS WITH DISABILITIES ACT (A.D.A.) AND THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (F.A.C.B.C.). MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND CROSSTRAKS.	19.	THE CONTRACTOR IS REQUIRED TO ADJUST ALL EXISTING AND PROPOSED VALVE BOXES, MANHOLE RIMS, GRATES AND OTHER IMPROVEMENTS AS REQUIRED TO MATCH THE FINAL GRADE.		
5.	SIDEWALKS ARE DESIGNED AND INTENDED FOR PEDESTRIAN TRAFFIC ONLY. ALL SIDEWALKS AND CURB CUTS SHALL BE IN ACCORDANCE WITH F.D.O.T. INDEX 304 AND SHALL INCLUDE DETECTABLE WARNING SURFACES. VALLEY GUTTER ADJACENT TO CURB CUTS SHALL DEViate FROM STANDARD DETAIL BY NOT EXCEEDING 12:1 SLOPES.	20.	CONTRACTOR SHALL COORDINATE WITH THE OWNERS REPRESENTATIVE. IN REGARDS TO THE LOCATION, SIZE AND QUANTITY OF ALL CONDUITS FOR CABLES, IRRIGATION LIGHTING AND OTHER UTILITIES PRIOR TO CONSTRUCTION OF THE ROADWAY UPGRADE. CABLES AND/OR CONDUIT SHALL HAVE A MINIMUM OF 30" COVER, EXTEND 5' BEYOND THE EDGE OF PAVEMENT, BACK OF CURB AND/OR SIDEWALK AT EACH END, AND ENDS SHALL BE SEALED AND IDENTIFIED WITH MARKING TAPE.		
6.	THE CONTRACTOR SHALL NOTIFY THE ENGINEER, OWNERS REPRESENTATIVE AND APPROPRIATE AGENCY 12 HOURS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOT FRY THE END NEAR WITHIN ONE WEEK OF COMPLETION OF DRAINAGE CONTROL STRUCTURES SO THAT ELEVATIONS MAY BE VERIFIED PRIOR TO COMPLETION OF CONSTRUCTION.	21.	CONTRACTOR SHALL NOT FRY THE END NEAR WITHIN 24 HOURS PRIOR TO PLACING SOD ON AREAS THAT REQUIRE CRITICAL MINIMUM OR MAXIMUM ELEVATIONS IN ORDER FOR ENGINEER TO VERIFY SUCH ELEVATIONS. THE OBLIGATION TO ACHIEVE MINIMUM ELEVATIONS REMAINS WITH THE CONTRACTOR.		
7.	CONTRACTOR SHALL NOT FRY THE END NEAR WITHIN 24 HOURS PRIOR TO PLACING SOD ON AREAS THAT REQUIRE CRITICAL MINIMUM OR MAXIMUM ELEVATIONS IN ORDER FOR ENGINEER TO VERIFY SUCH ELEVATIONS. THE OBLIGATION TO ACHIEVE MINIMUM ELEVATIONS REMAINS WITH THE CONTRACTOR.	22.	SOD A 12" STRIP ADJACENT TO ALL PAVEMENT PER F.D.O.T. REQUIREMENTS. SOD ALL UNPAVED DISTURBED AREAS WITHIN F.D.O.T. RIGHT OF WAY. ALL OTHER UNPAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEED, FERTILIZED AND MULCHED UNLESS NOTED OTHERWISE.		
8.	ANY PUBLIC LAND CORNER OR BENCHMARK WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED AND IF DAMAGED OR BEING DESTROYED MUST BE PROPERLY REFERENCED BY THE CONTRACTOR.	23.	THE CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIAL ENCOUNTERED FROM FILL AREAS PRIOR TO PLACEMENT OF FILL, AND SUCH MATERIAL SHALL BE STOCKPILED OR REMOVED AS DIRECTED BY OWNER.		
9.	EXISTING IMPROVEMENTS SHALL REMAIN UNLESS NOTED OTHERWISE, AND SHALL BE RESTORED TO A CONDITION EQUIVALENT TO THAT WHICH EXISTED PRIOR TO COMMENCING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER. EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.	24.	THE PROPERTY OWNER OR DESIGNATED AUTHORITY IS RESPONSIBLE FOR THE PERPETUAL MAINTENANCE OF ALL FEATURES OF THE SURFACE WATER MANAGEMENT SYSTEM AS SHOWN IN THESE DRAWINGS AND AS REQUIRED BY LOCAL, STATE AND FEDERAL PERMITS. IT IS FURTHER RECOMMENDED THAT THE SURFACE WATER MANAGEMENT SYSTEM BE INSPECTED SEMI-ANNUALLY.		
10.	THE CONTRACTOR SHALL OBTAIN ANY CLEARING, VEGETATION REMOVAL OR RIGHT-OF-WAY PERMITS REQUIRED FOR THIS PROJECT. ALL DEBRIS SHALL BE REMOVED FROM SITE AND PROPERLY DISPOSED OF.	25.	CONTRACTOR SHALL VERIFY DESIGN DETAILS WITH ENGINEER PRIOR TO ORDERING STRUCTURES. STRUCTURE TYPES LABELED ON THE PLANS FOR ITEMS SUCH AS JUNCTION BOXES AND INLETS MAY ONLY BE A REFERENCE TO THE TOP OF THE STRUCTURE. CERTAIN STRUCTURE TYPES REQUIRE A LARGER BOTTOM TO ACCOMMODATE LARGER PIPE SIZES AND/OR PIPE ANGLES. THE APPROPRIATE SIZE AND SHAPE OF THE BOTTOM OF THE STRUCTURE SHALL BE DETERMINED BY THE CONTRACTOR WITH CONSIDERATION GIVEN TO ADJACENT EXISTING OR PROPOSED UTILITIES. THE COST FOR THE ENTIRE STRUCTURE IS INCLUDED IN THE UNIT PRICE FOR THE PRIMARY STRUCTURE.		
11.	CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS. CONTRACTOR SHALL ASSURE THAT ALL TRAFFIC CONTROL DEVICES MEET ACCEPTABLE STANDARDS AS OUTLINED IN THE LATEST EDITION OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA)'S "QUALITY STANDARDS FOR WORK ZONE TRAFFIC CONTROL DEVICES", AND SHALL IMMEDIATELY REPAIR, REPLACE OR CLEAN DAMAGED, DEFACED OR DIRTIED DEVICES. TRAFFIC CONTROL OPERATION PROCEDURES SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. ANY IMPACTS TO TRAFFIC FLOW SHALL BE COORDINATED WITH AND APPROVED BY THE APPROPRIATE LOCAL AGENCY.	26.	STORM DRAIN PIPE LENGTHS ARE APPROXIMATE AND HAVE BEEN MEASURED FROM INSIDE FACE OF STRUCTURE. SANITARY SEWER PIPE LENGTHS ARE APPROXIMATE AND ARE MEASURED FROM THE CENTER OF STRUCTURE.		
12.	CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER AND OWNER'S REPRESENTATIVE.	27.	CONTRACTOR SHALL MAINTAIN MINIMUM SEPARATION BETWEEN UTILITY LINES AS SHOWN ON UTILITY LOCATION DETAIL AND IN ACCORDANCE WITH APPLICABLE LOCAL UTILITY SERVICE PROVIDER REQUIREMENTS.		
13.	THE LOCATIONS OF PROPOSED DRAINAGE STRUCTURES AND UTILITY LINES MAY BE FIELD ADJUSTED TO PRESERVE EXISTING VEGETATION AS APPROVED IN ADVANCE BY THE ENGINEER. UNDERGROUND CONTRACTOR SHALL MINIMIZE THE WORK AREA AND WIDTH OF TRENCHES TO AVOID DISTURBANCES OF NATURAL VEGETATION. EXERCISE CARE TO PROTECT THE ROOTS OF TREES TO REMAIN WITHIN THE BRANCH SPREAD OF SUCH TREES. PERFORM ALL TRENCHING BY HAND. OPEN THE TRENCH ONLY WHEN UTILITIES CAN BE INSTALLED IMMEDIATELY. PRUNE UNWANTED ROOTS CLEANLY AND BACKFILL AS SOON AS POSSIBLE. SPOIL FROM TRENCHES SHALL BE PLACED ONLY ON PREVIOUSLY CLEARED AREAS OR AS DIRECTED BY THE OWNER. CONTRACTOR SHALL NOT REMOVE OR DISTURB ANY TREES AND/OR SHRUBS WITHOUT PRIOR APPROVAL BY OWNER.	28.	ALL COMPONENTS OF THE POTABLE WATER SYSTEM SHALL BE IN CONFORMANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) STANDARD 15.1. ALL COMPONENTS, INSTALLATION AND TESTING OF THE POTABLE WATER SYSTEM SHALL BE IN ACCORDANCE WITH ALL A.W.W.A. APPLICABLE STANDARDS.		
14.	INSTALLATION OF SUBSURFACE CONSTRUCTION, INCLUDING BUT NOT LIMITED TO WATER, SEWER AND IRRIGATION LINES, PUBLIC UTILITIES AND STORM DRAINAGE IS REQUIRED PRIOR TO COMPACTION OF THE ROADWAY SUBGRADE.	29.	CONTRACTOR TO COORDINATE WITH ALL OTHER CONTRACTORS WORKING ON THE PROJECT SITE, THE OWNERS' REPRESENTATIVE, WITH ELECTRIC, TELEPHONE AND CABLE COMPANIES TO ASSURE THAT NO SANITARY SEWER, WATERLINE OR IRRIGATION SERVICES ARE INSTALLED UNDER PROPOSED TRANSFORMERS.		
15.	SUBGRADE AND LIMEROCK BASE COURSES TO BE COMPACTED TO 98% MINIMUM OF THE MAXIMUM DRY DENSITY AS SPECIFIED BY AASHTO T-190 TESTING. CONTRACTOR SHALL PROVIDE THE ENGINEER SATISFACTORY DENSITY TESTS FOR SUBGRADE PRIOR TO PAYMENT OF FINAL ACCEPTANCE. EXCESS ROADWAY AND BASE AND COMPACTED SOIL SHALL BE REMOVED FROM ALL LANDSCAPE AREAS PRIOR TO FINAL GRADING.	30.	DEFLECTION TESTING IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS FOR GRAVITY SEWER MAY NOT BE UNDERTAKEN UNTIL 30 DAYS AFTER FINAL BACKFILLING OF THE TRENCH IS COMPLETE. SEWER DEFLECTION MAY NOT EXCEED THE MAXIMUM PROVIDED IN THE TECHNICAL SPECIFICATIONS OR 5%, WHICHEVER IS LESS.		

SYMBOL LEGEND			
NOTE: THE SYMBOLS REPRESENTED BELOW ARE STANDARDS UTILIZED BY THIS FIRM AND NOT ALL ARE REQUIRED FOR THE SUBJECT PROJECT.			
DRAINAGE			
	VALLEY GUTTER INLET		TYPE 5 INLET (LEFT)
	DITCH BOTTOM INLET		TYPE 5 INLET (RIGHT)
	DRAINAGE JUNCTION BOX		TYPE 6 INLET
	MITERED END SECTION		TYPE 9 INLET
	CONTROL STRUCTURE		TYPE 10 INLET
	HEADWALL		YARD DRAIN
	FLARED END SECTION		FLOW ARROW
UTILITIES			
	11.25' BEND		SANITARY SEWER MANHOLE
	22.5' BEND		SINGLE SANITARY SEWER SERVICE
	45' BEND		DOUBLE SANITARY SEWER SERVICE
	90' BEND		CLEANOUT
	TEE		PUMP STATION
	REDUCER		S NGL E IRRIGATION SERVICE
	A R RELEASE VALVE		DOUBLE IRRIGATION SERVICE
	WYE		S NGL E WATER SERVICE
	CROSS		DOUBLE WATER SERVICE
	CAP OR PLUG		FIRE HYDRANT ASSEMBLY (PLAN VIEW)
	BACTERIOLOGICAL SAMPLE POINT		FIRE HYDRANT ASSEMBLY (PROFILE VIEW)
	PERMANENT BLOW OFF ASSEMBLY		GATE VALVE (PROFILE V EW)
	TEMPORARY BLOW OFF ASSEMBLY		
	45' VERTICAL DEFLECTION		
	GATE VALVE		
	PLUG VALVE		
STANDARD CURB TYPES		SEE F.D.O.T. INDEX 300 FOR ADDITIONAL DETAILS	
	TYPE "A" CURB		TYPE "D" CURB
	CURB TRANSITION		TYPE "E" CURB
	VALLEY GUTTER		TYPE "F" CURB
SIGNAGE AND MARKINGS			
	SIGN (PLAN VIEW)		LEFT ONLY
	CONSERVATION SIGN LOCATION		RIGHT ONLY
NOTE: FINAL LOCATIONS TO BE FIELD LOCATED AFTER CONSTRUCTION WITH WATER MANAGEMENT DISTRICT STAFF.			LEFT OR RIGHT
	HANDICAP SYMBOL		STRAIGHT OR RIGHT
	MODEL HOMES, MODEL UNITS, MODEL DISPLAY CENTERS.		STRAIGHT OR LEFT
	"NO MOW NO/HERBICIDING" SIGN ALONG LAKE SHORELINE		STRAIGHT, LEFT OR RIGHT
			STRAIGHT
IDENTIFICATION			
	LOT NUMBER		SECTION LABEL
	BUILDING ID NUMBER		NORTH ARROW
	STORM STRUCTURE I.D.		BAR SCALE
	SANITARY STRUCTURE I.D.		
	FIRE HYDRANT LABEL		
	SOIL BORING LOCATION		
EROSION CONTROL			
NOTE: SEE EROSION CONTROL DETAILS FOR ADDITIONAL INFORMATION.			
	INLET PROTECTION		DOUBLE ROW SILT FENCE
			SINGLE ROW SILT FENCE
			FLOATING TURBIDITY BARRIER
SURVEYING			
	FOUND NAIL AS NOTED		GAS LINE MARKER
	SET 1/2" ROD ROW WITH CAP STAMPED LB6940		TELEPHONE RISER
	SET 4x4" CONC. MONUMENT STAMPED LB6940		WATER BOX
	SET P K NAIL WITH DISC STAMPED LB6940		ELECTRIC BOX
	FOUND CONC. MONUMENT AS NOTED		SIGN
	FOUND IRON PIPE OR IRON ROD AS NOTED		FIRE HYDRANT
	DRAINAGE INLET		WATER VALVE
	DRAINAGE MANHOLE		SANITARY MANHOLE
	MITERED END SECTION		SANITARY CLEAN OUT
	LIGHT POLE		SANITARY SEWER VALVE
	CONCRETE POWER POLE		BENCH MARK
	WOOD POWER POLE		
	GUY ANCHOR		
QUANTITIES AND PAYMENT			
CONTRACTOR SHALL REFER TO THE BID TABULATION AND PROJECT TECHNICAL SPECIFICATIONS FOR NOTES REGARDING THE METHOD OF PAYMENT FOR SPECIFIC PAY ITEMS. ITEMS NOT SPECIFICALLY REFERENCED IN THE SPECIFICATIONS OR BID TABULATION SHALL BE PAID FOR PER THE LATEST VERSIONS OF THE APPROPRIATE F.D.O.T. DESIGN STANDARDS INDEX AND F.D.O.T. STANDARD SPECIFICATION SECTION.			



Barraco
and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING
www.barraco.net
2271 MCGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 481-3170
FAX (239) 481-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-8940

PREPARED FOR

6810 INTERNATIONAL CENTER BLVD.
FORT MYERS, FL 33912
PHONE (239) 482-1500
FAX (239) 481-8477
WWW.LANDSOLUTIONS.NET

PROJECT DESCRIPTION

METRO
28

LEE COUNTY, FLORIDA

ENGINEER OF RECORD
CARL A. BARRACO, P.E., FOR THE FIRM
FLORIDA P.E. NO. 38536 - CARLB@BARRACO.NET

DRAWING NOT VALID WITHOUT SEAL, SIGNATURE AND DATE
© COPYRIGHT 2019, BARRACO AND ASSOCIATES, INC.
REPRODUCTION, CHANGES OR ASSIGNMENTS ARE PROHIBITED

F.I.E. NAME: 23610A05.DWG

LOCATION: J:\23610\DWG\ERP\

PLOT DATE: FRI 10-4-2019 - 9:39 AM

PLOT BY: CHRIS PAULY

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

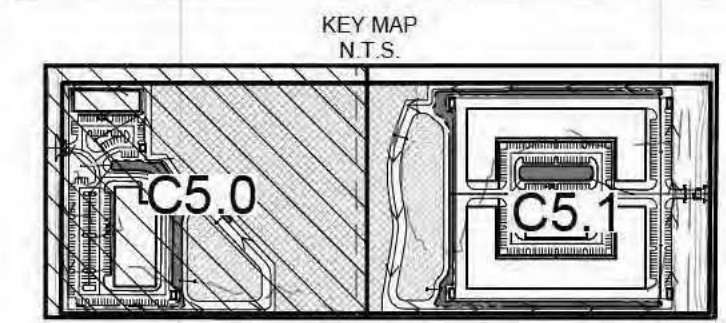
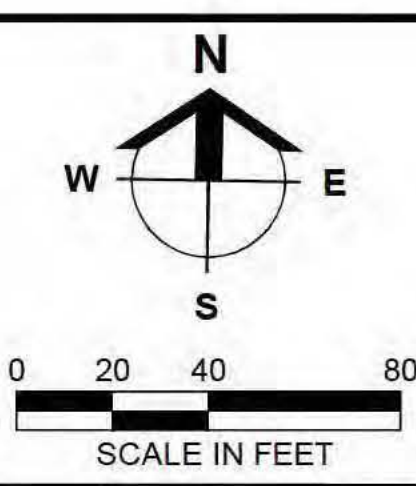
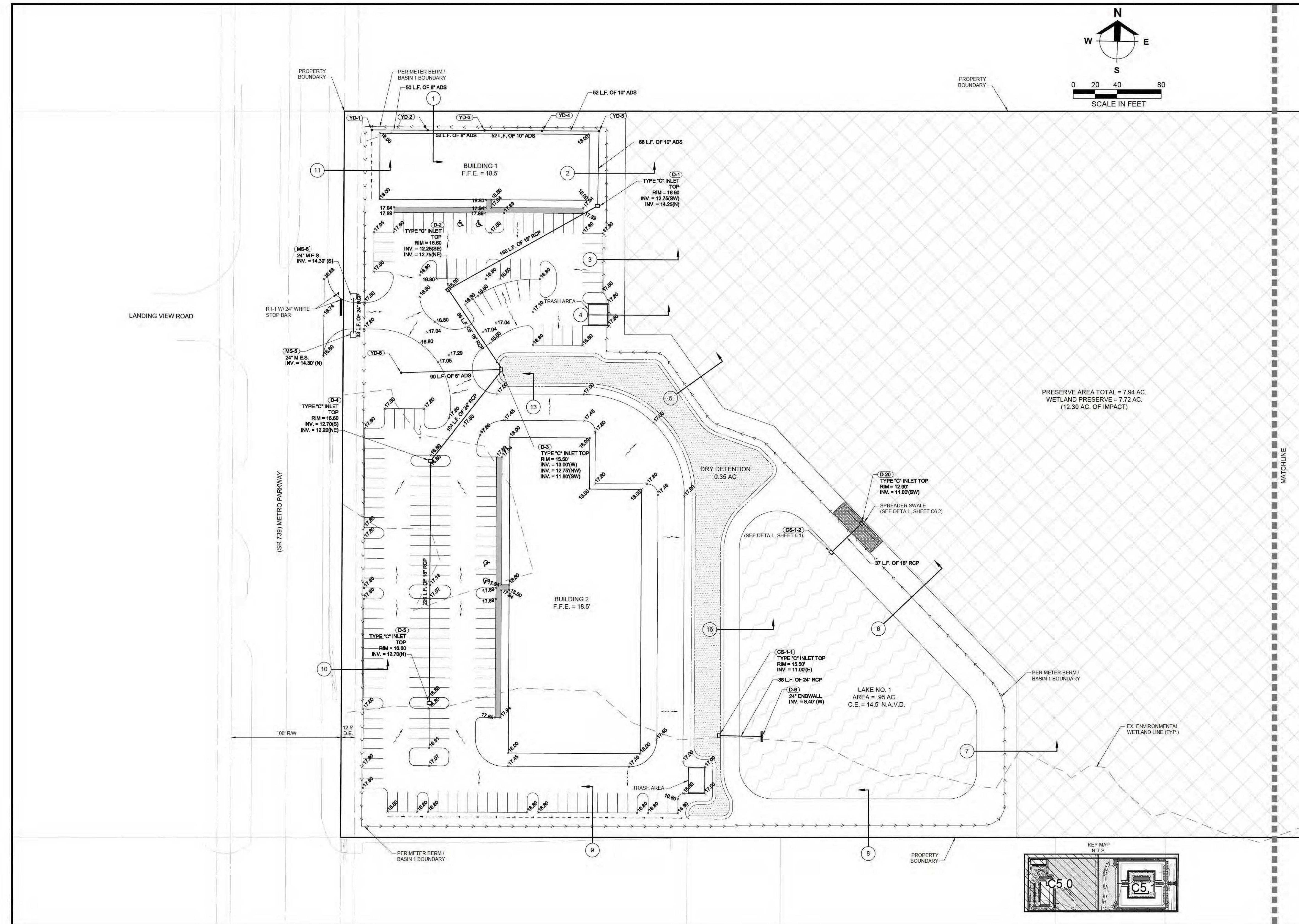
PLAN STATUS

APPROVAL SUBMITTAL PLANS
10/01/2019

**AERIAL PHOTOGRAPH
AND
EXISTING CONDITION**

PROJECT / F.I.E. NO. **23610**

SHEET NUMBER **C3.0**



Barraco
and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING
www.barraco.net
2271 MCGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 481-3170
FAX (239) 481-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-8940

PREPARED FOR
Land Solutions inc.
6810 INTERNATIONAL CENTER BLVD.
FORT MYERS, FL 33912
PHONE (239) 482-1500
FAX (239) 481-8477
WWW.LANDSOLUTIONS.NET

PROJECT DESCRIPTION

METRO
28

LEE COUNTY, FLORIDA

ENGINEER OF RECORD
CARL A. BARRACO, P.E., FOR THE FIRM
FLORIDA P.E. NO. 38536 - CARLB@BARRACO.NET

DRAWING NOT VALID WITHOUT SEAL, SIGNATURE AND DATE
© COPYRIGHT 2019, BARRACO AND ASSOCIATES, INC.
REPRODUCTION, CHANGES OR ASSIGNMENTS ARE PROHIBITED
F.I.E. NAME J23610A15.DWG
LOCATION J:\23610\DWG\ERP\1
PLOT DATE FRI 10-4-2019 - 9:40 AM
PLOT BY CHRIS PAULY

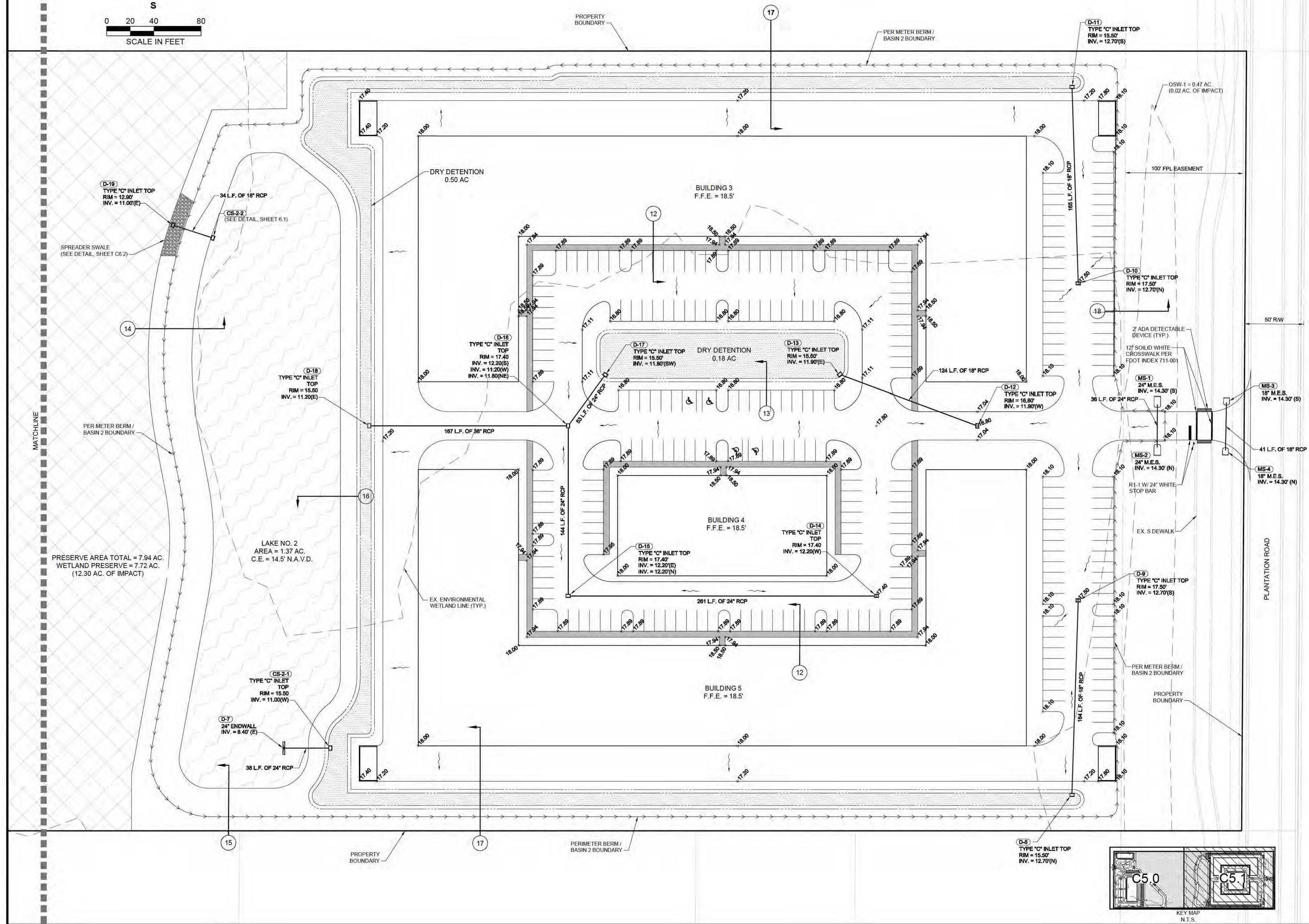
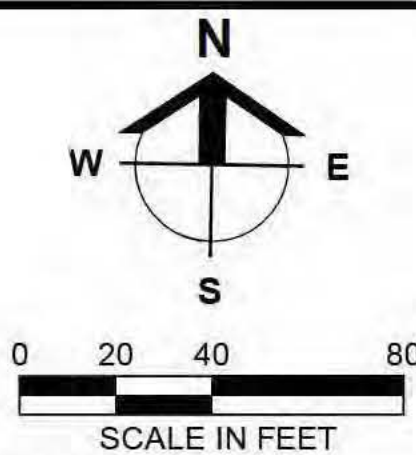
CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS
APPROVAL SUBMITTAL PLANS
10/01/2019

DETAILED PAVING
GRADING AND
DRAINAGE PLANS

PROJECT / F.I.E. NO. **23610**
SHEET NUMBER **C5.0**



Barraco
and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING
www.barraco.net
2271 MCGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 481-3170
FAX (239) 481-3189
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-8940

PREPARED FOR
Land Solutions inc.
6810 INTERNATIONAL CENTER BLVD.
FORT MYERS, FL 33912
PHONE (239) 482-1500
FAX (239) 481-8477
WWW.LANDSOLUTIONS.NET

PROJECT DESCRIPTION
METRO
28
LEE COUNTY, FLORIDA

ENGINEER OF RECORD
CARL A. BARRACO, P.E., FOR THE FIRM
FLORIDA P.E. NO. 38536 - CARLB@BARRACO.NET

DRAWING NOT VALID WITHOUT SEAL, SIGNATURE AND DATE
© COPYRIGHT 2019, BARRACO AND ASSOCIATES, INC.
REPRODUCTION, CHANGES OR ASSIGNMENTS ARE PROHIBITED
F.L.E. NAME 23610A15.DWG
LOCATION J:\23610\DWG\ERP1
PLOT DATE FRI 10-4-2019 - 9:40 AM
PLOT BY CHRIS PAULY

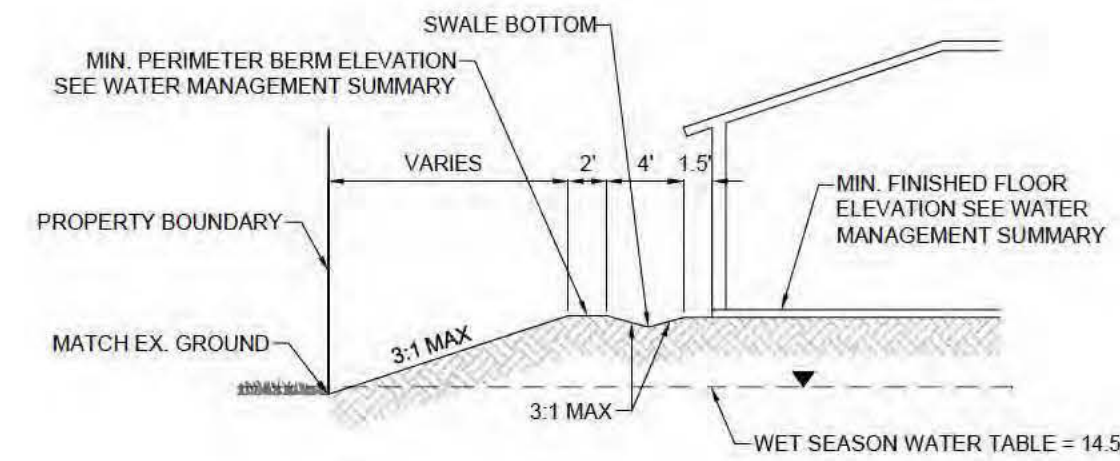
CROSS REFERENCED DRAWINGS

PLAN REVISIONS

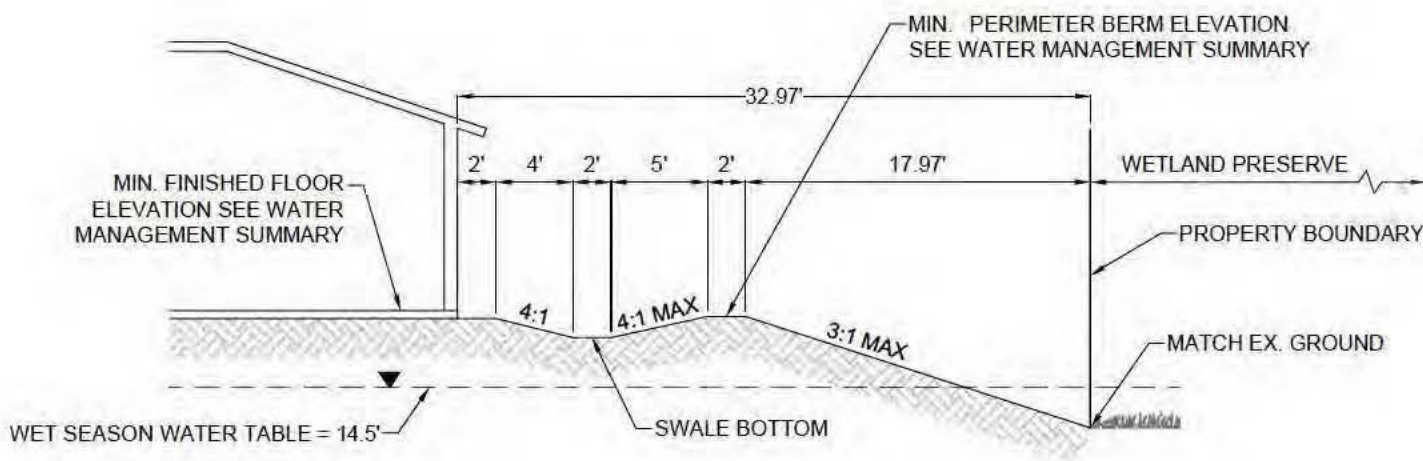
PLAN STATUS
APPROVAL SUBMITTAL PLANS
10/01/2019

DETAILED PAVING
GRADING AND
DRAINAGE PLANS

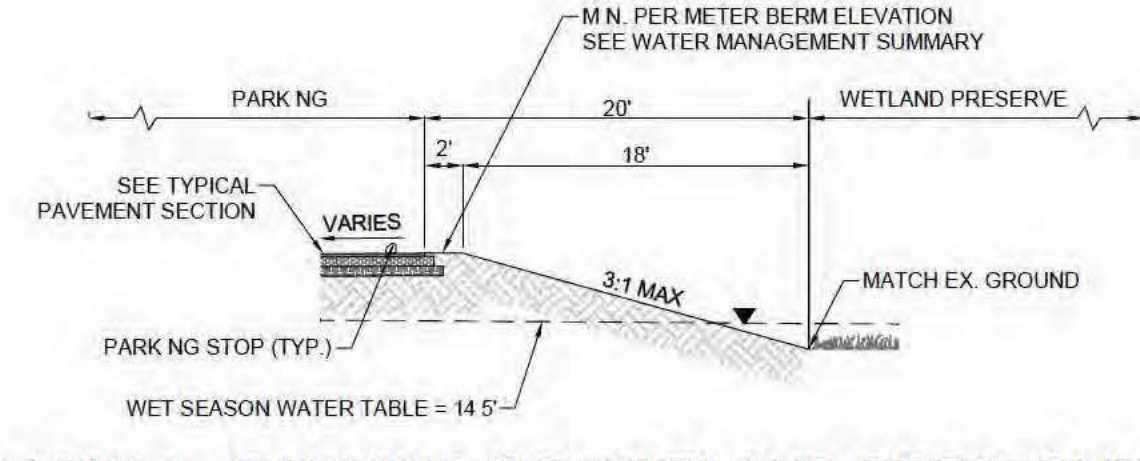
PROJECT / F.L.E. NO. **23610** SHEET NUMBER **C5.1**



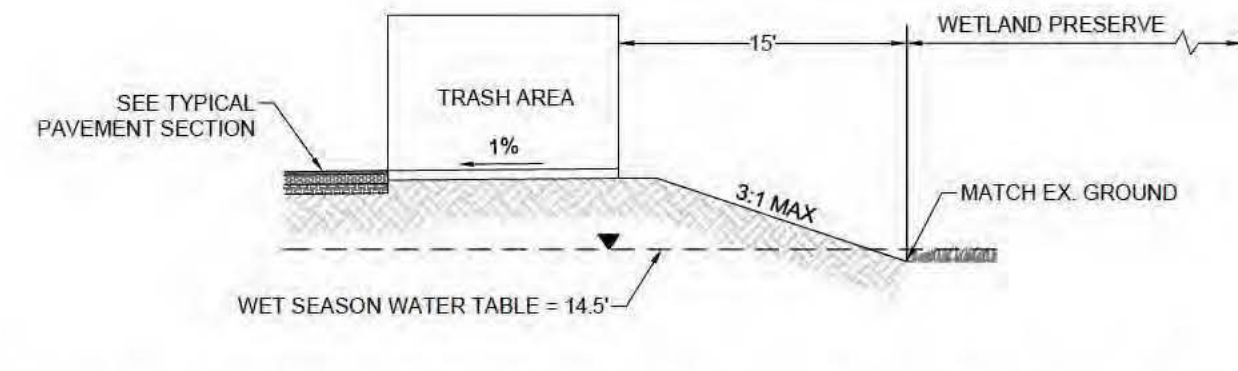
1 BASIN 1 - NORTH PROPERTY BOUNDARY TO BLDG.
N.T.S.



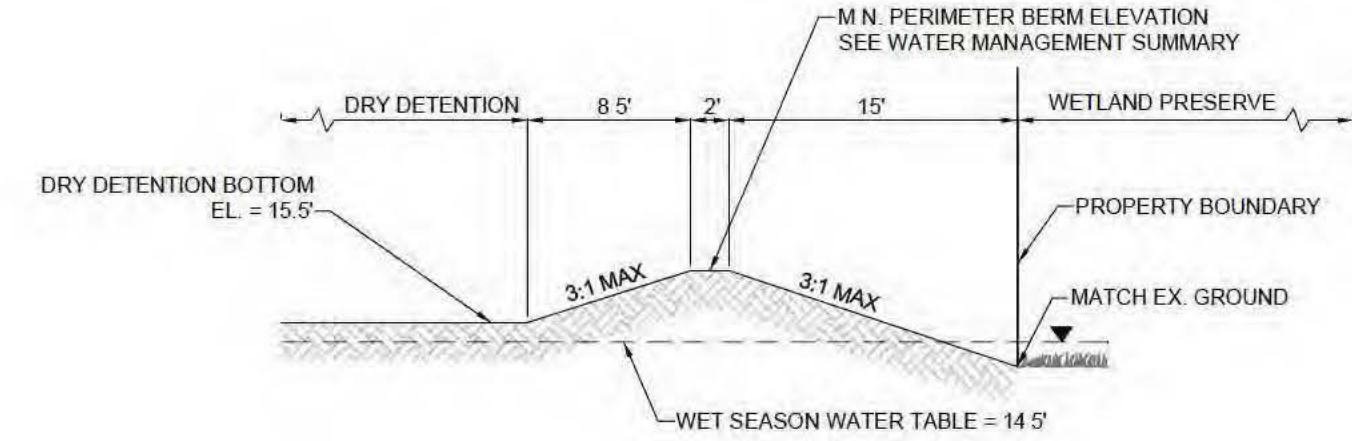
2 BASIN 1 - BLDG. TO WETLAND PRESERVE
N.T.S.



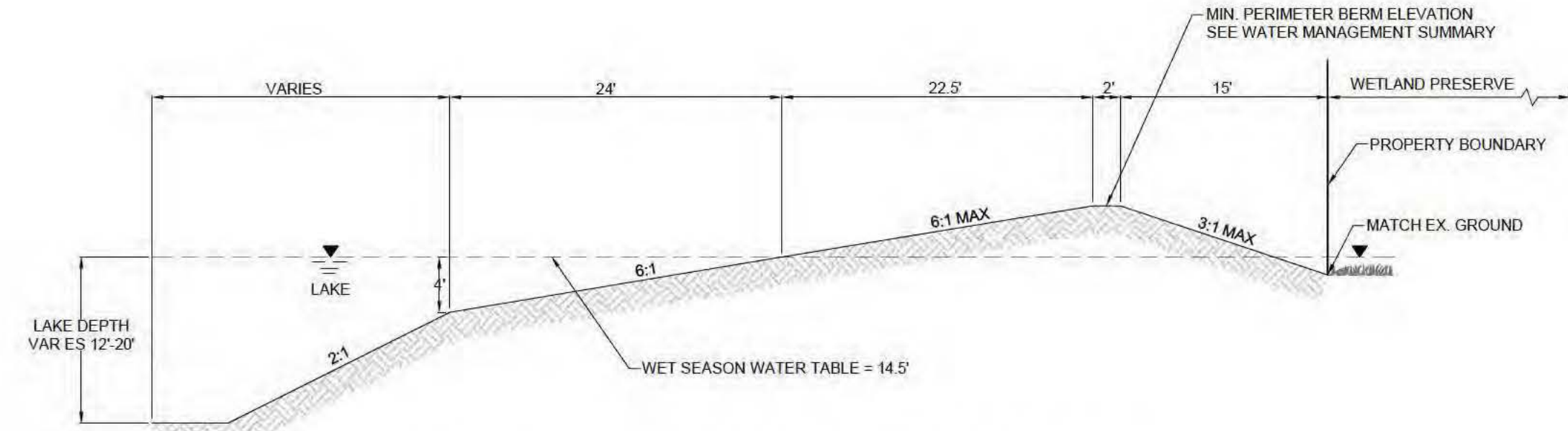
3 BASIN 1 - PARKING TO WETLAND PRESERVE
N.T.S.



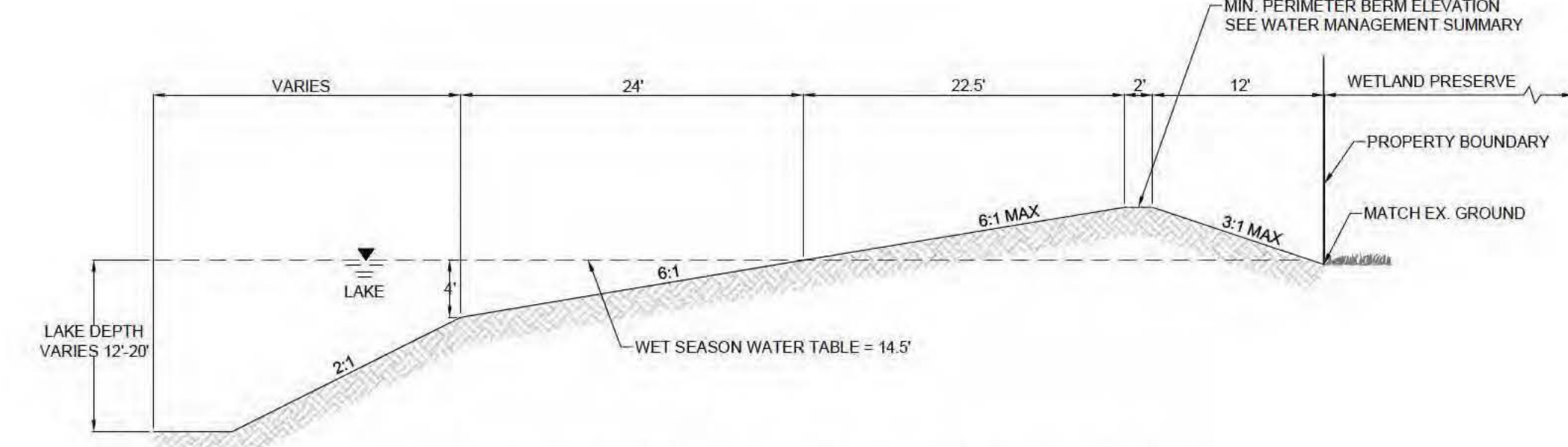
4 BASIN 1 - TRASH AREA TO WETLAND PRESERVE
N.T.S.



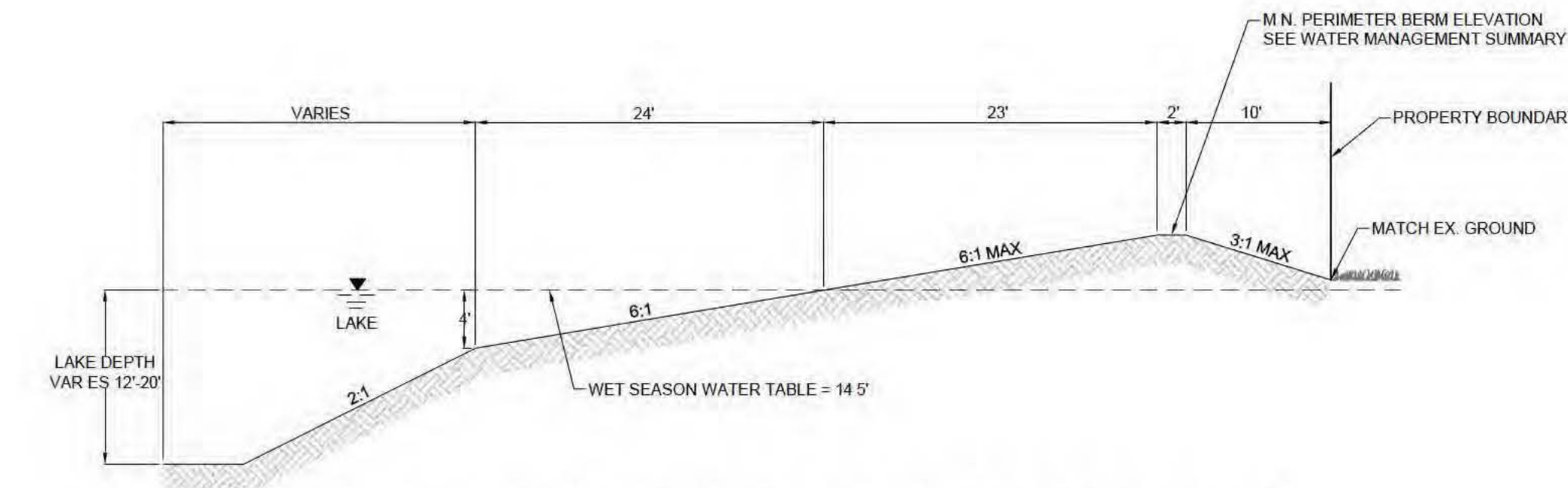
5 BASIN 1 - DRY DETENTION TO WETLAND PRESERVE
N.T.S.



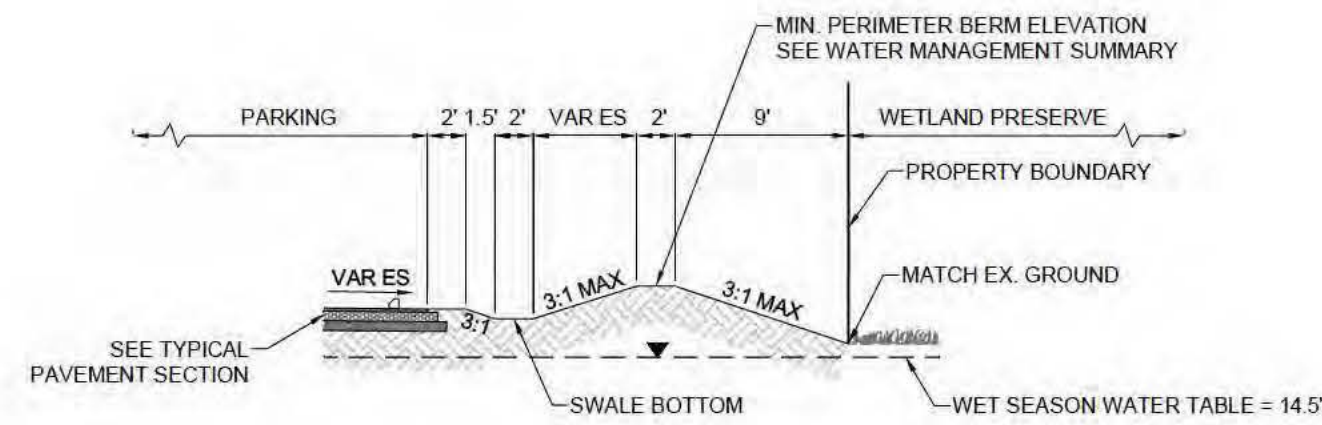
6 BASIN 1 - LAKE TO WETLAND PRESERVE
N.T.S.



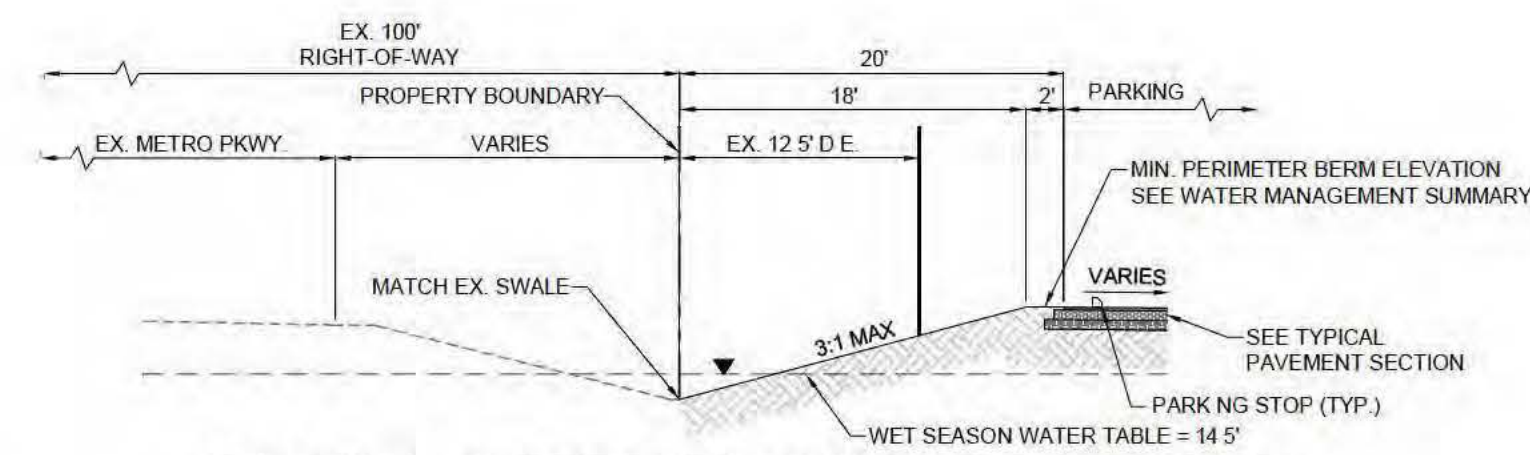
7 BASIN 1 - LAKE TO WETLAND PRESERVE
N.T.S.



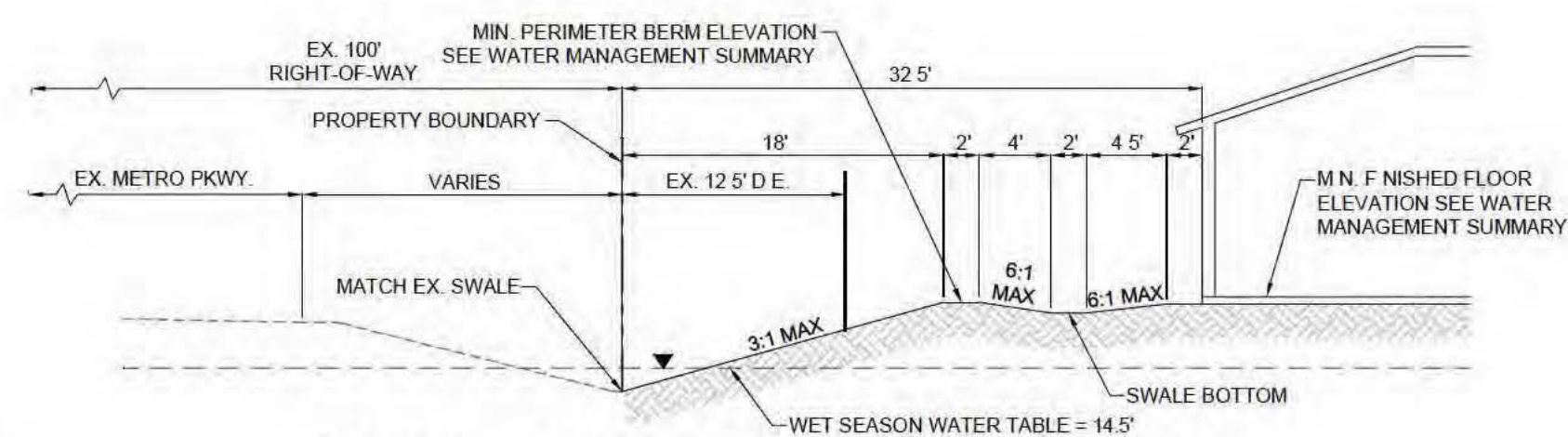
8 BASIN 1 - LAKE TO SOUTH PROPERTY BOUNDARY
N.T.S.



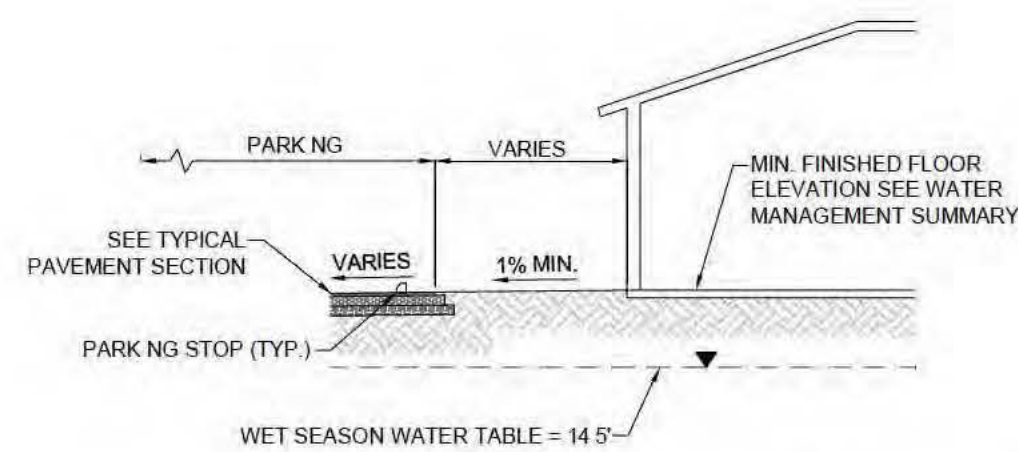
9 BASIN 1 - PARKING TO SOUTH PROPERTY BOUNDARY
N.T.S.



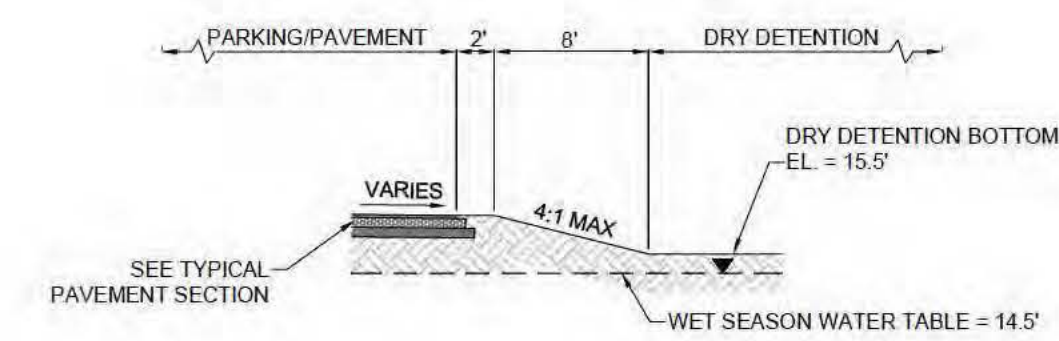
10 BASIN 1 - METRO PARKWAY TO PARKING
N.T.S.



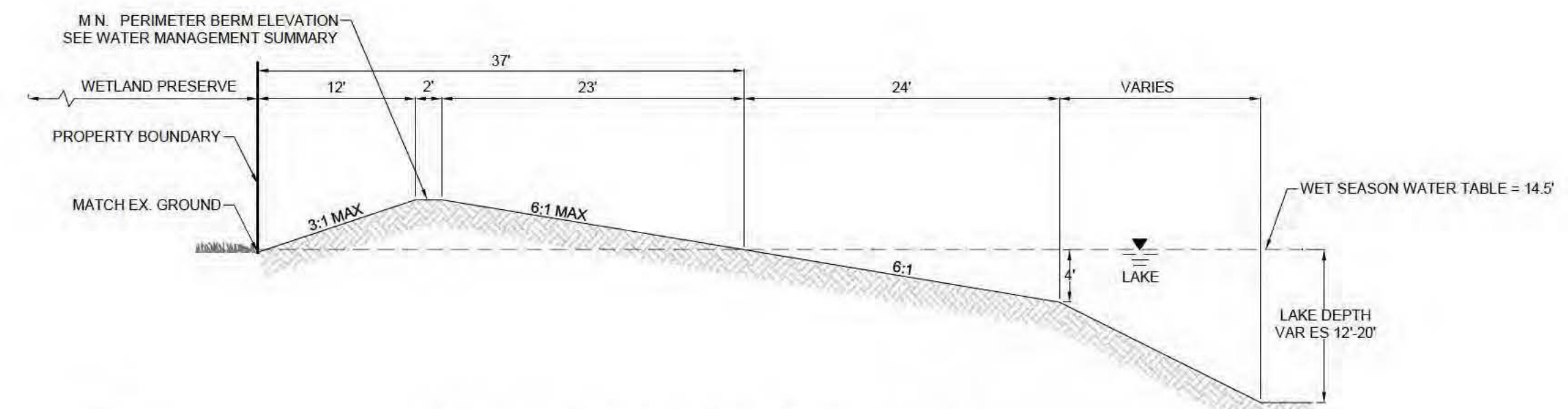
11 BASIN 1 - METRO PARKWAY TO BLDG.
N.T.S.



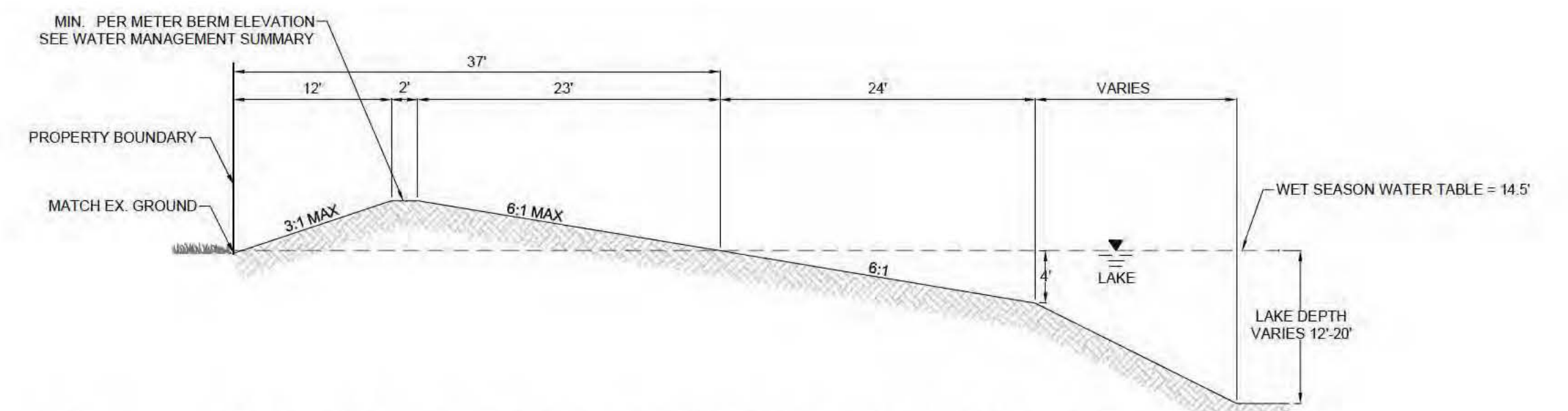
12 BASIN 1 AND 2 - PARKING TO BLDG.
N.T.S.



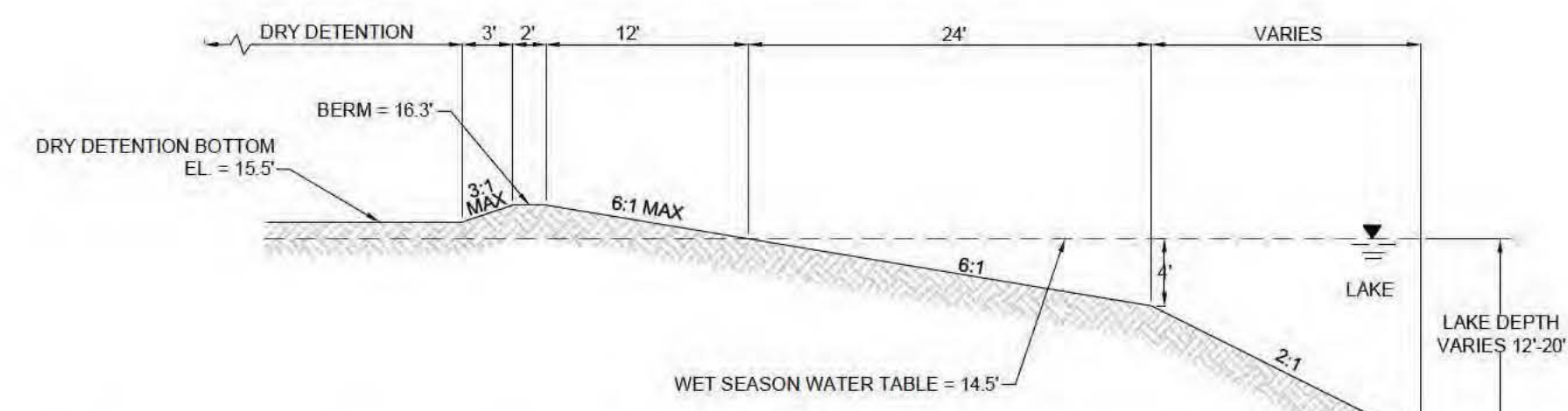
13 BASINS 1 AND 2 - PAVEMENT/PARKING TO DRY DETENTION
N.T.S.



14 BASIN 2 - PRESERVE TO LAKE
N.T.S.



15 BASIN 2 - SOUTH PROPERTY BOUNDARY TO LAKE
N.T.S.



16 BASINS 1 AND 2 - DRY DETENTION TO LAKE
N.T.S.

Barraco

and Associates, Inc.

CIVIL ENGINEERING - LAND SURVEYING

LAND PLANNING

www.barraco.net

2271 MCGREGOR BLVD., SUITE 100

POST OFFICE DRAWER 2800

FORT MYERS, FLORIDA 33902-2800

PHONE (239) 481-3170

FAX (239) 481-3189

FLORIDA CERTIFICATES OF AUTHORIZATION

ENGINEERING 7995 - SURVEYING LB-8940

PREPARED FOR

Land Solutions

inc.

6810 INTERNATIONAL CENTER BLVD.

FORT MYERS, FL 33912

PHONE (239) 482-1500

FAX (239) 481-8477

WWW.LANDSOLUTIONS.NET

PROJECT DESCRIPTION

METRO

28

LEE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, P.E., FOR THE FIRM

FLORIDA P.E. NO. 38536 - CARLB@BARRACO.NET

DRAWING NOT VALID WITHOUT SEAL, SIGNATURE AND DATE

© COPYRIGHT 2019, BARRACO AND ASSOCIATES, INC.

REPRODUCTION, CHANGES OR ASSIGNMENTS ARE PROHIBITED

FILE NAME

J:\23610\DWG\ERP1

LOCATION

J:\23610\DWG\ERP1

PLOT DATE

FRI 10-4-2019 - 9:41 AM

PLOT BY

CHRIS PAULY

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

APPROVAL SUBMITTAL PLANS

10/01/2019

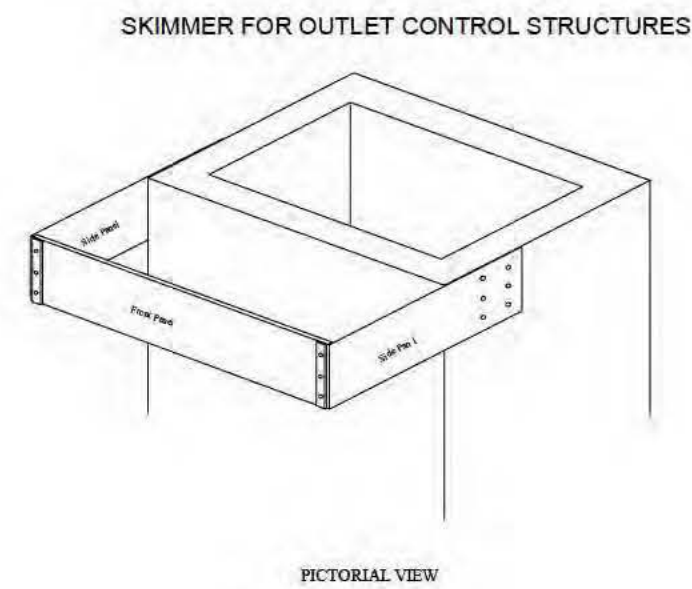
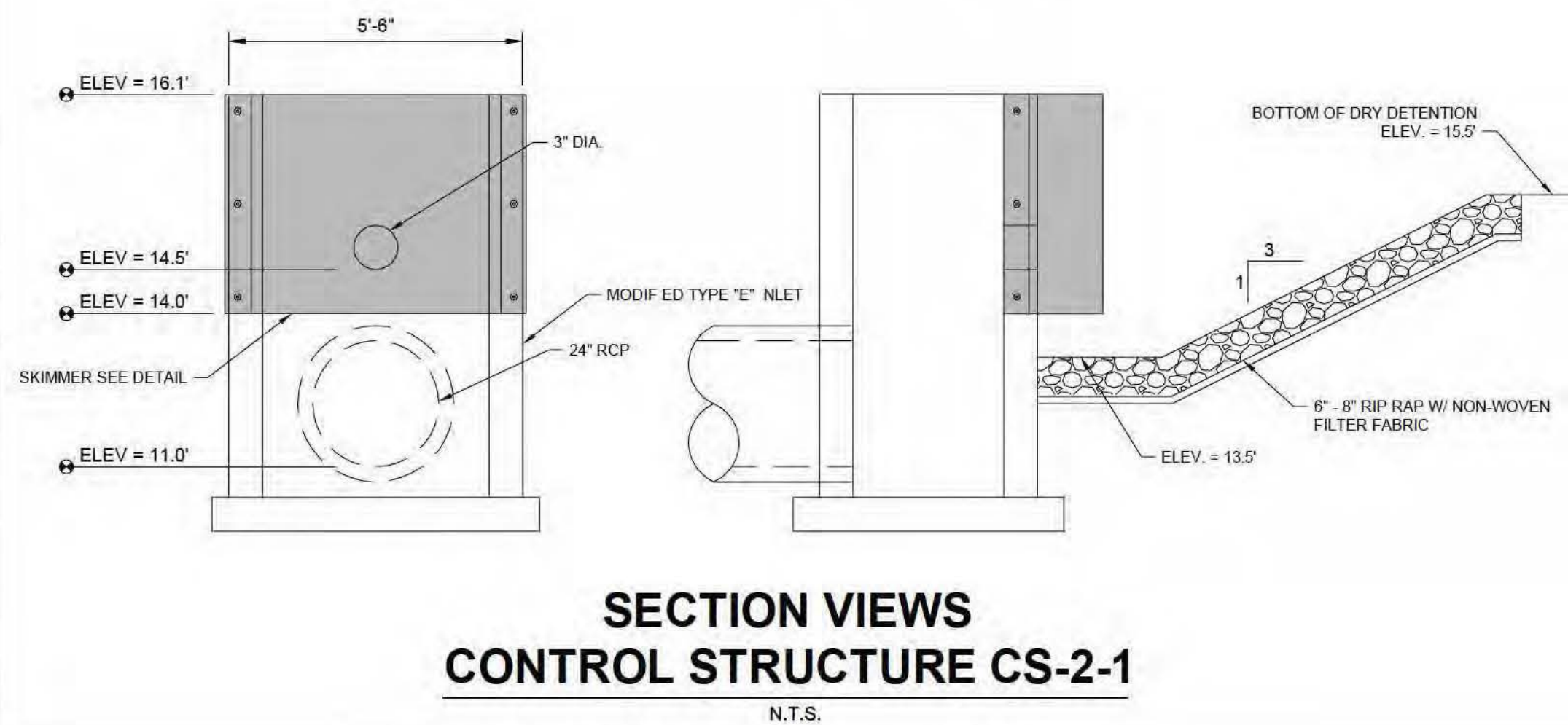
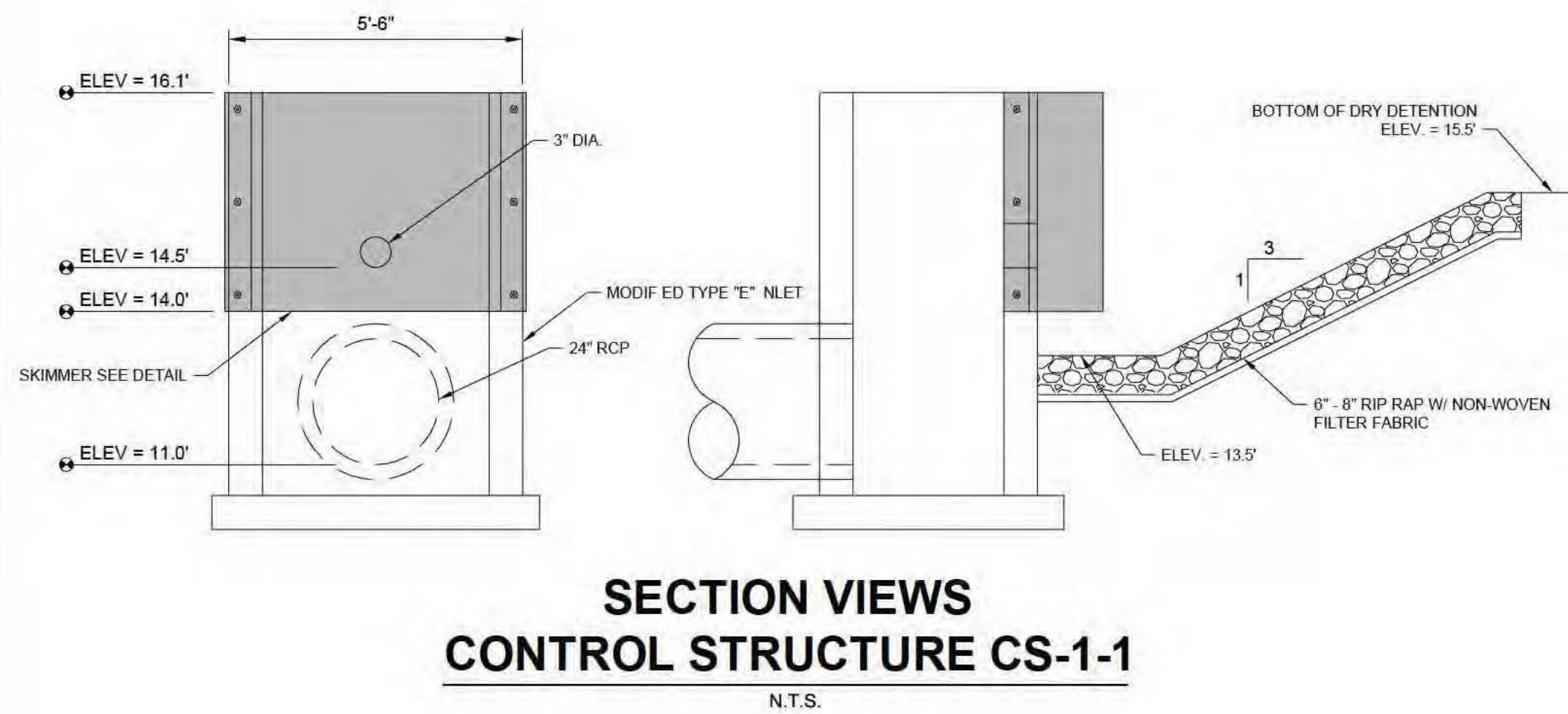
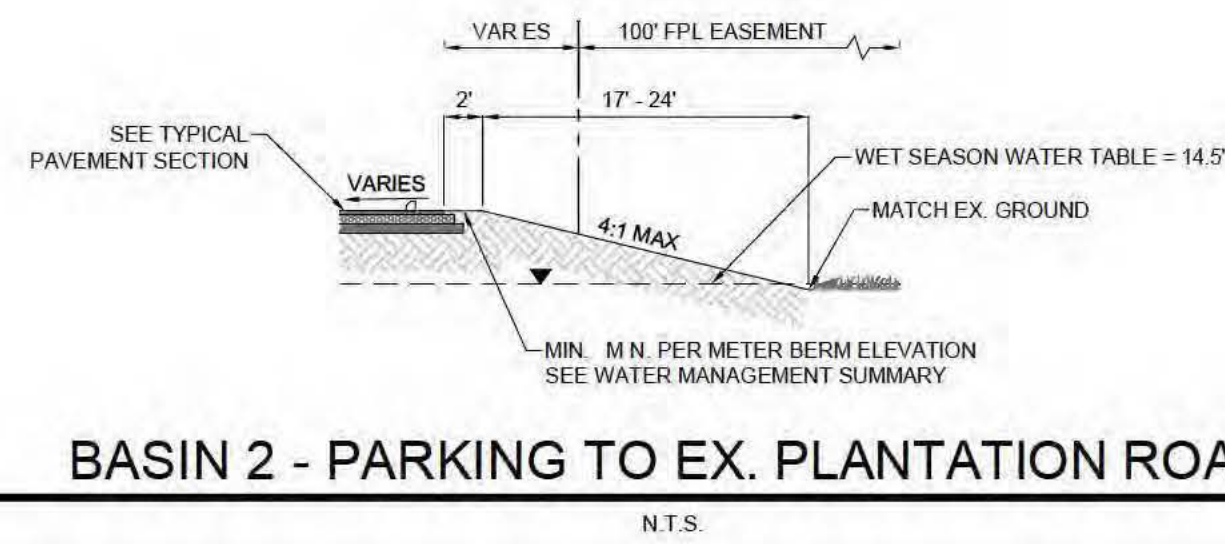
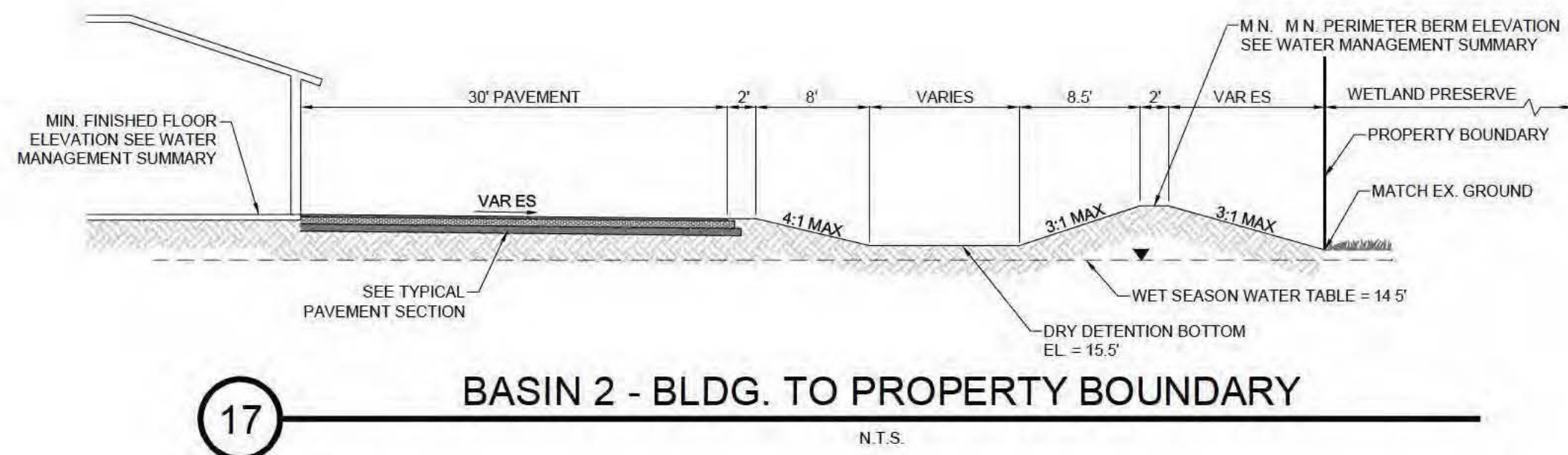
TYPICAL SECTIONS AND DETAILS

PROJECT / FILE NO.

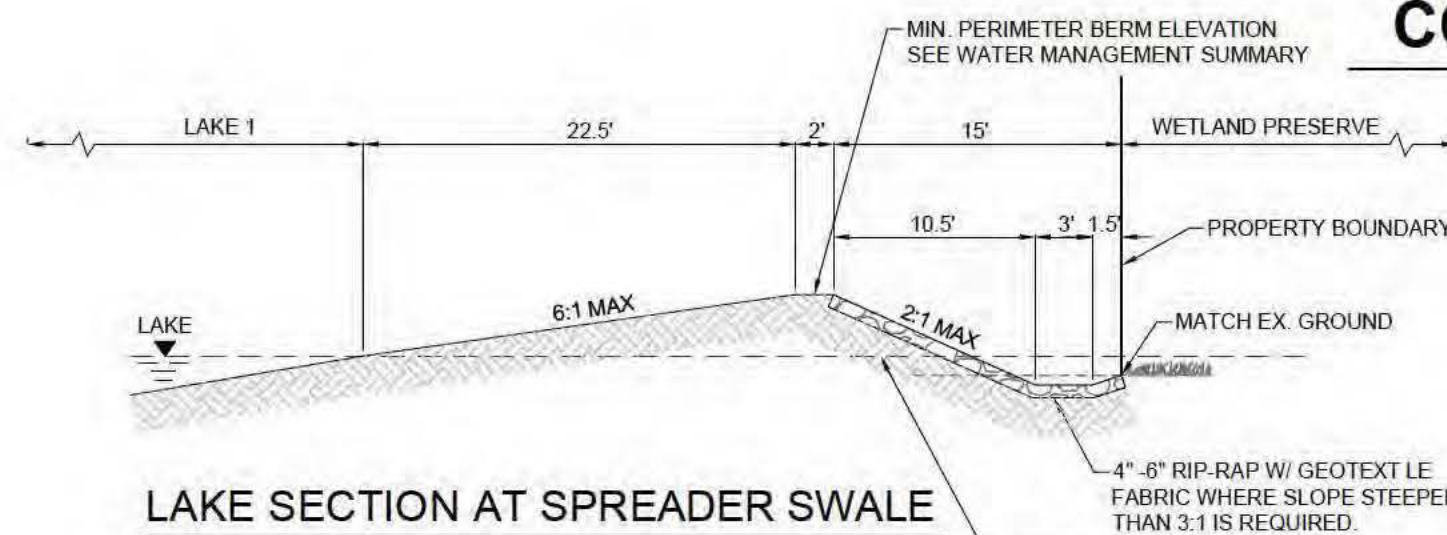
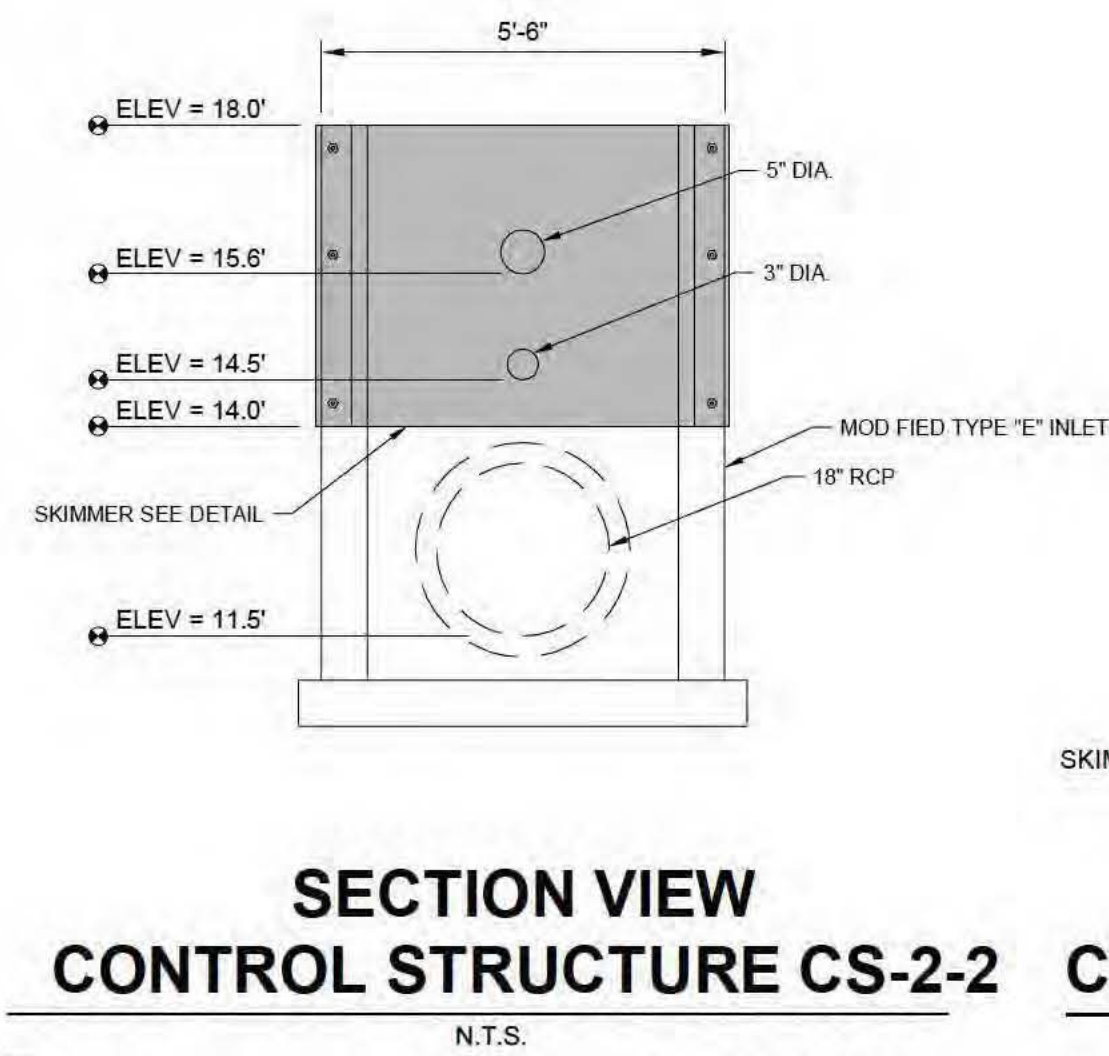
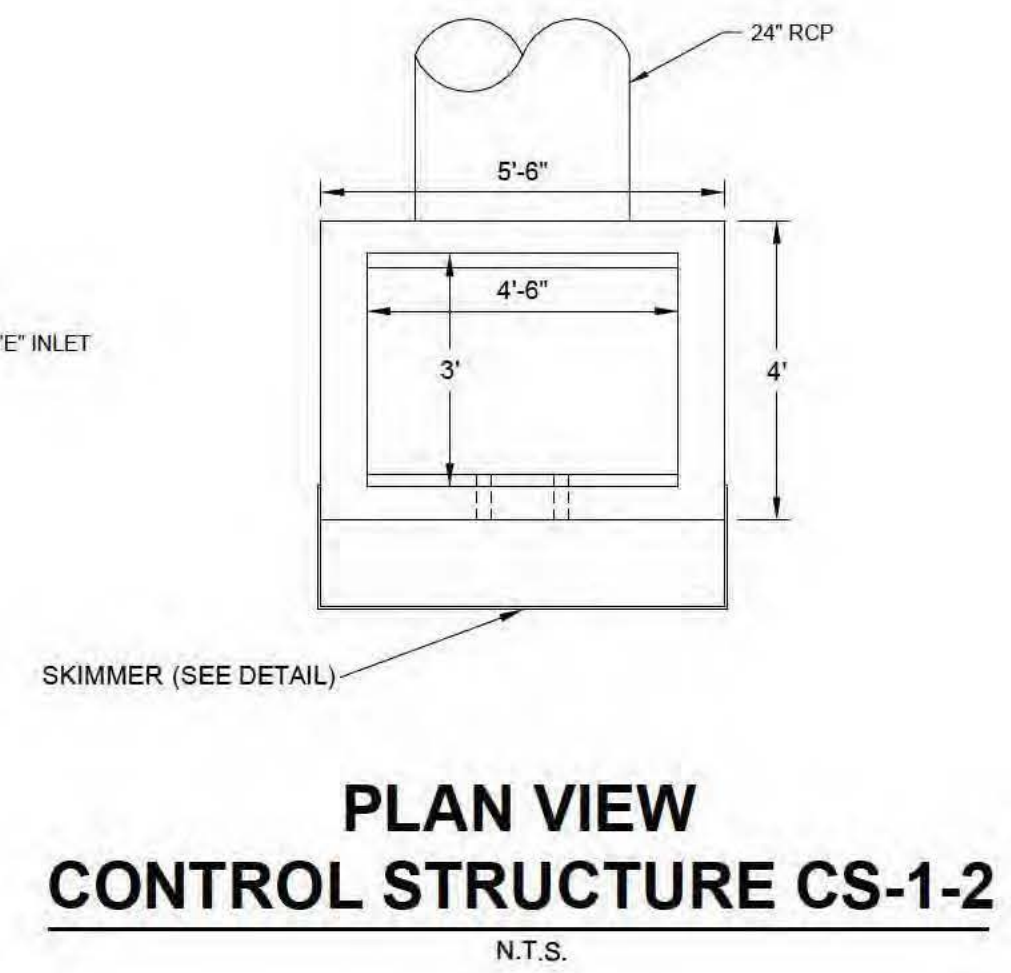
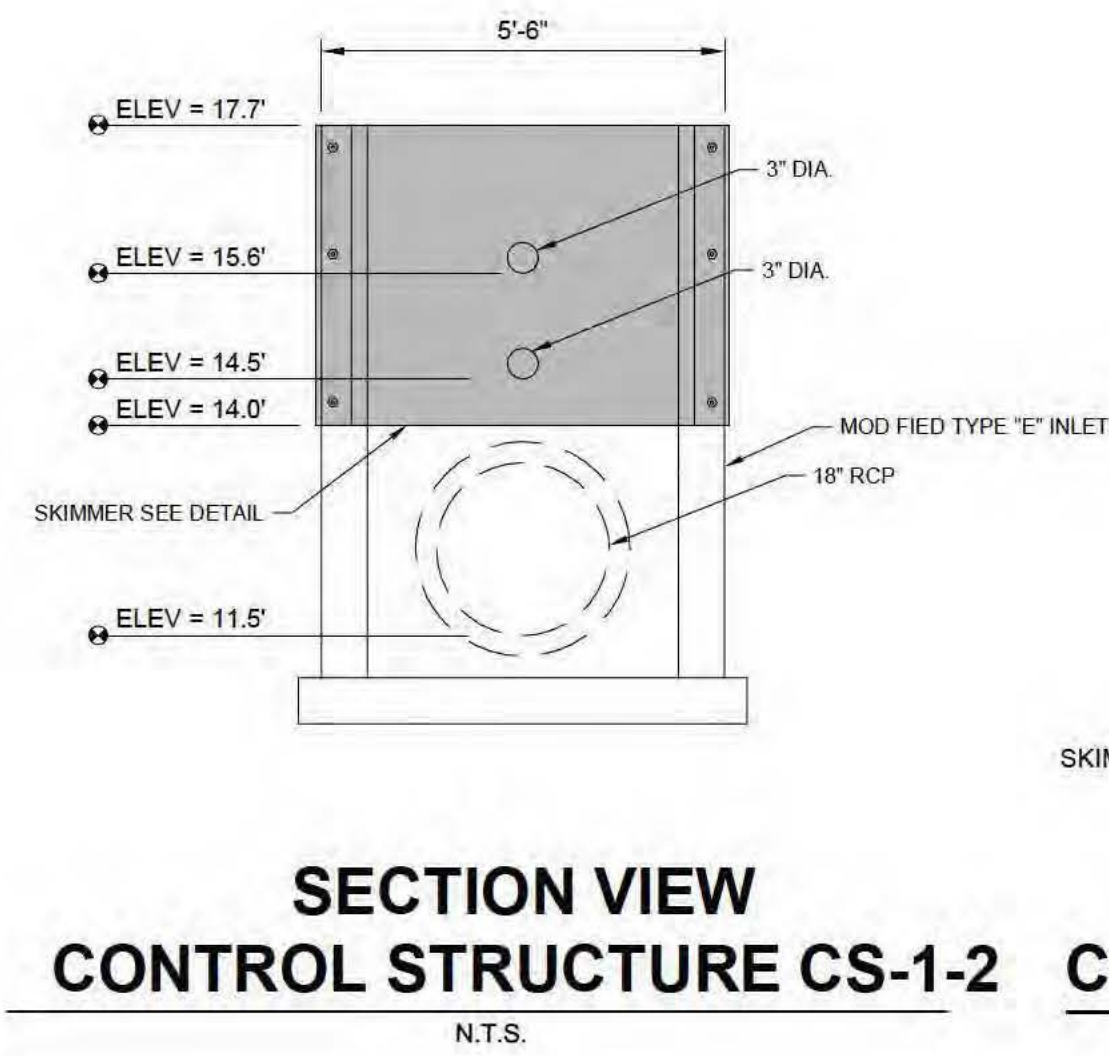
23610

SHEET NUMBER

C6.1

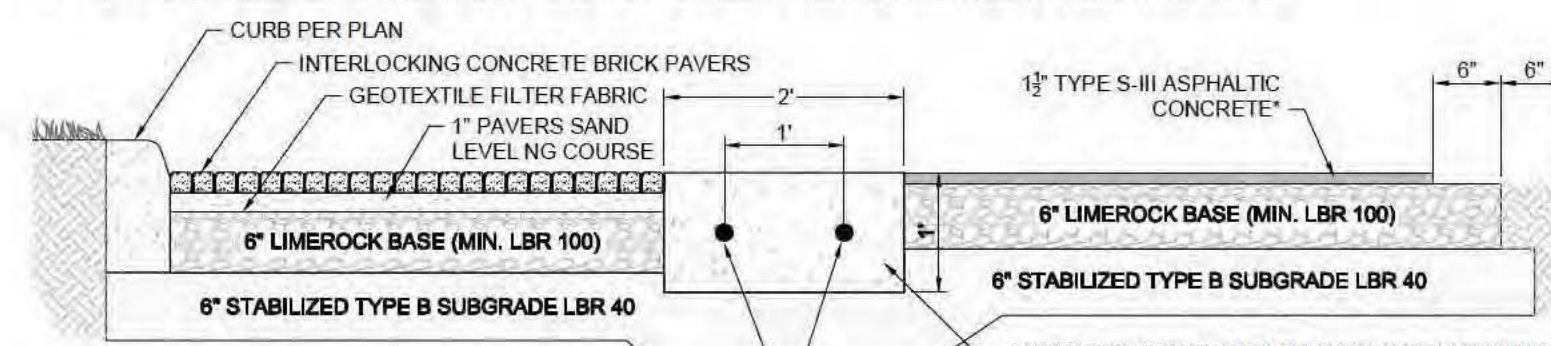


- (REFER TO FOOTING INDEX AND FOR FURTHER DETAILS)
1. THIS SKIMMER IS INTENDED FOR USE ON TYPE C, D, OR E DITCH BOTTOM INLETS THAT ARE USED AS OUTLET CONTROL STRUCTURES OF STORMWATER MANAGEMENT FACILITIES.
 2. THE SIDE PANELS ARE DIMENSIONALLY SYMMETRIC, THEREFORE THEY MAY BE USED ON EITHER SIDE OF THE STRUCTURE.
 3. TWO (2) SKIMMERS MAY BE CONSTRUCTED ON ONE STRUCTURE PROVIDED THEY ARE ON OPPOSITE ENDS.
 4. THE WIDTH OF THE FRONT PANEL (DIMENSION W) SHALL BE THE SAME AS THE OUTSIDE DIMENSION ACROSS THE FRONT OF THE STRUCTURE.
 5. THE FRONT PANEL, SIDE PANELS, AND FLAT BARS ARE TO BE HOT DIP GALVANIZED AFTER FABRICATION.
 6. THE LOCATION OF THE REINFORCING STEEL IN THESE STRUCTURES MUST CONFORM TO THE APPLICABLE STANDARDS TO AVOID CONFLICT WITH THE EXPANSION ANCHORS USED TO ATTACH THE SKIMMER.
 7. GRATES TO BE USED ON THE INLETS UNLESS OTHERWISE SPECIFIED IN THE PLANS.
 8. A SKIMMER CONSISTS OF TWO (2) SIDE PANELS, ONE FRONT PANEL, TWO (2) FLAT BARS, AND ACCESSORY HARDWARE. THE COST OF THE SKIMMER IS TO BE INCLUDED IN THE COST OF THE INLET.



NOTES

1. LIMEROCK BASE AND STABILIZED SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 98% OF MODIFIED PROCTOR (AASHTO T-180).
2. 3" OF LIMEROCK BASE MATERIAL MAY SUBSTITUTED AS AN ALTERNATIVE DESIGN TO THE 6" STABILIZED SUBGRADE.
3. OPTIONAL BRICK PAVEMENT SURFACE MAY BE UTILIZED FOR ALL OR PART OF THE ROADWAY OR PARKING SURFACES.
4. REFERENCE LANDSCAPE PLANS FOR PAVEMENT LOCATIONS, THICKNESS, SIZE, COLOR, PATTERN, AND SPECIFICATIONS. SEALANT MAY BE UTILIZED AT THE DISCRETION OF OWNER.
5. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI. WITHIN 28 DAYS UNLESS NOTED OTHERWISE.



STRUCTURAL EQUIVALENCY CALCULATIONS:

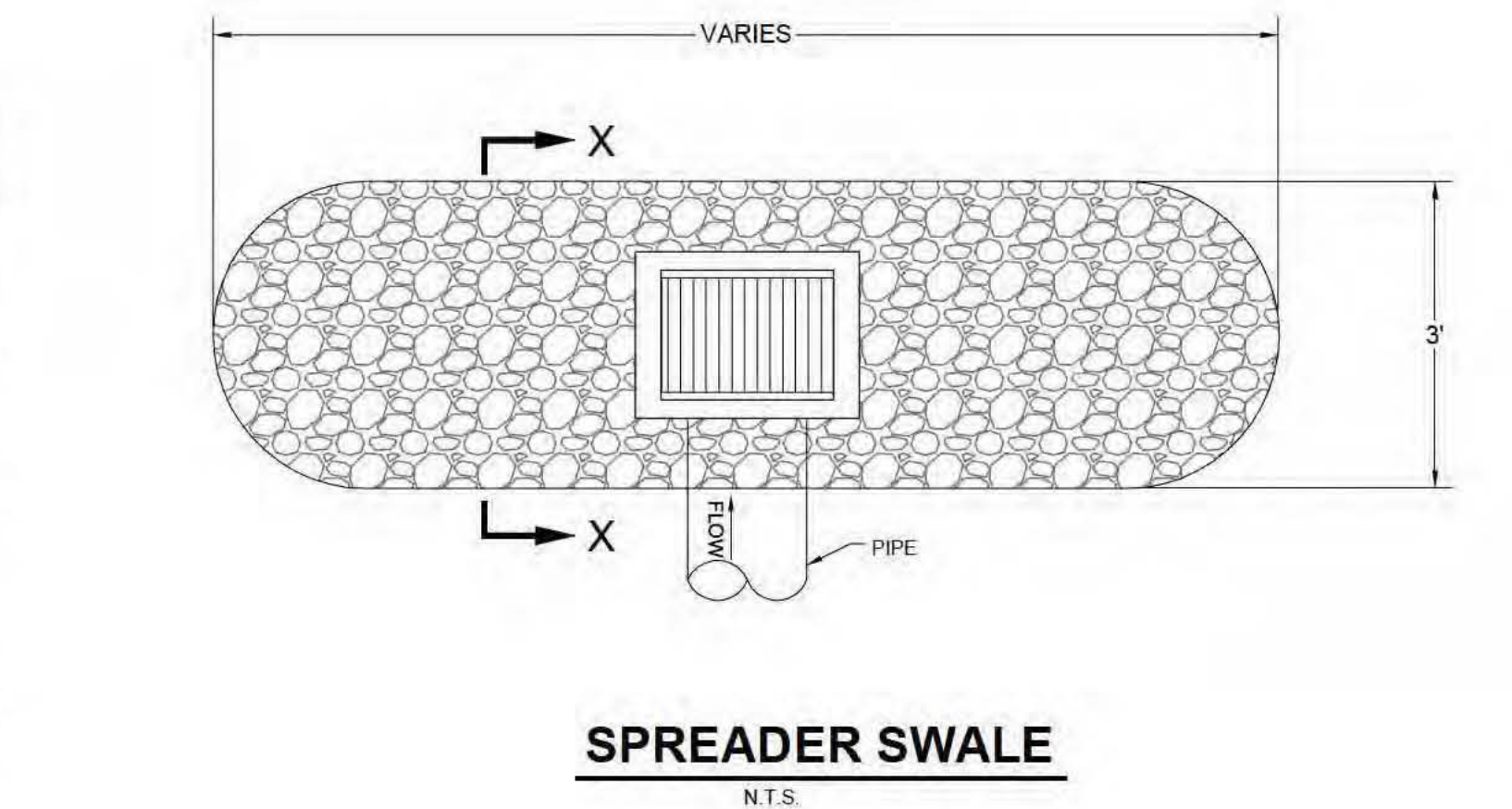
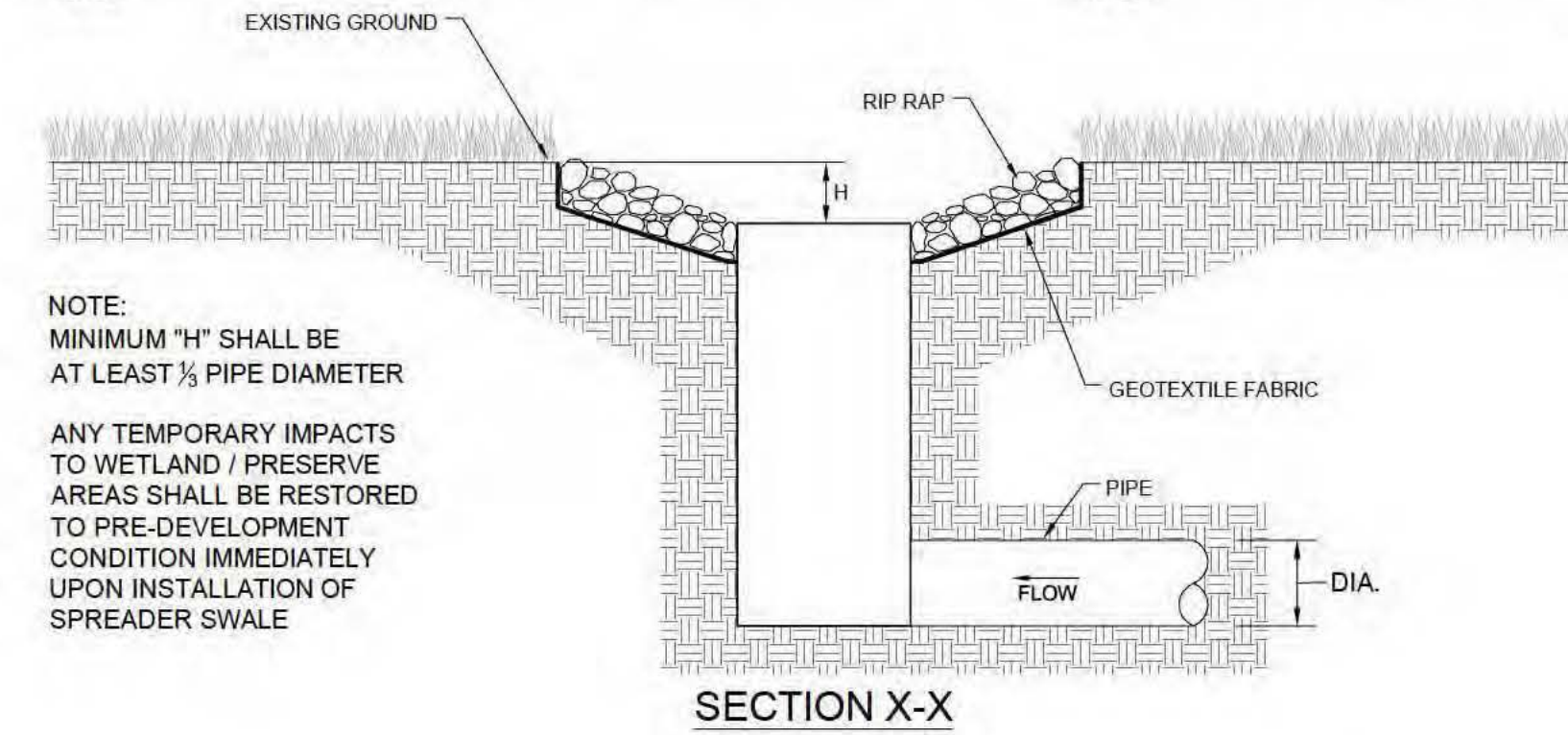
STANDARD PAVEMENT SECTION	LAYER COEFFICIENT	THICKNESS	SUBTOTAL
TYPE S-III ASPHALT PAVEMENT	0.30 / INCH	1 1/2"	0.45
LIMEROCK BASE (LBR 100)	0.18 / INCH	6"	1.08
STABILIZED SUBGRADE (LBR 40)	0.08 / INCH	6"	0.48
TOTAL			2.01

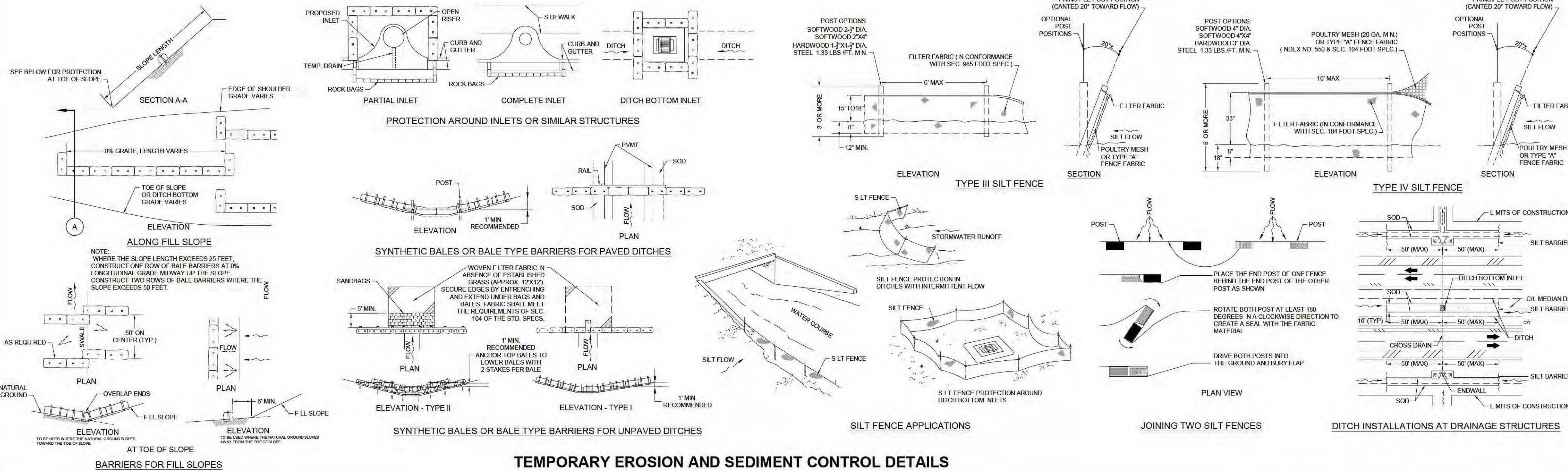
COST OF BRICK PAVERS, LIMEROCK BASE AND SAND TO BE INCLUDED IN UNIT COST FOR BRICK PAVERS. COST OF SUBGRADE TO BE INCLUDED IN UNIT COST FOR STABILIZED SUBGRADE.

* TWO (2) 3/4" LIFTS OF TYPE S-III ASPHALTIC CONCRETE MAY BE PROVIDED AS AN ALTERNATE. THE FIRST LIFT SHALL BE PLACED PRIOR TO CERTIFICATE OF COMPLETION FOR SITE WORK. THE SECOND LIFT SHALL BE PLACED PRIOR TO RECEIVING THE CERTIFICATE OF OCCUPANCY FOR THE LAST UNIT IN EACH PHASE OF CONSTRUCTION.

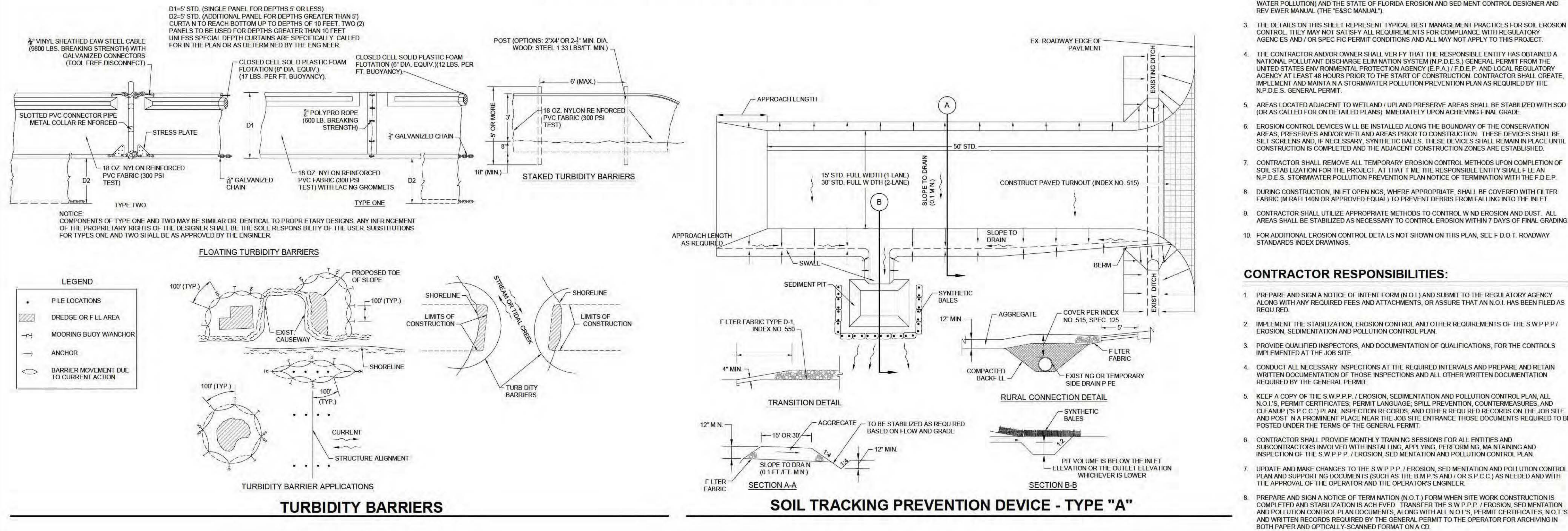
ALL UNPAVED AREAS WITHIN THE RIGHT OF WAY SHALL RECEIVE SOIL OR SEED & MULCH.

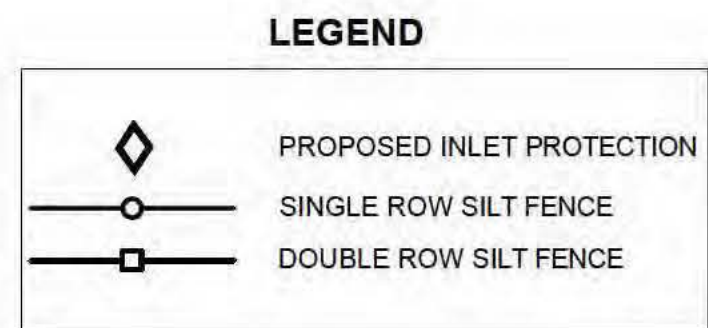
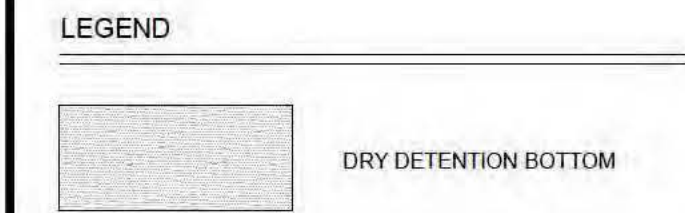
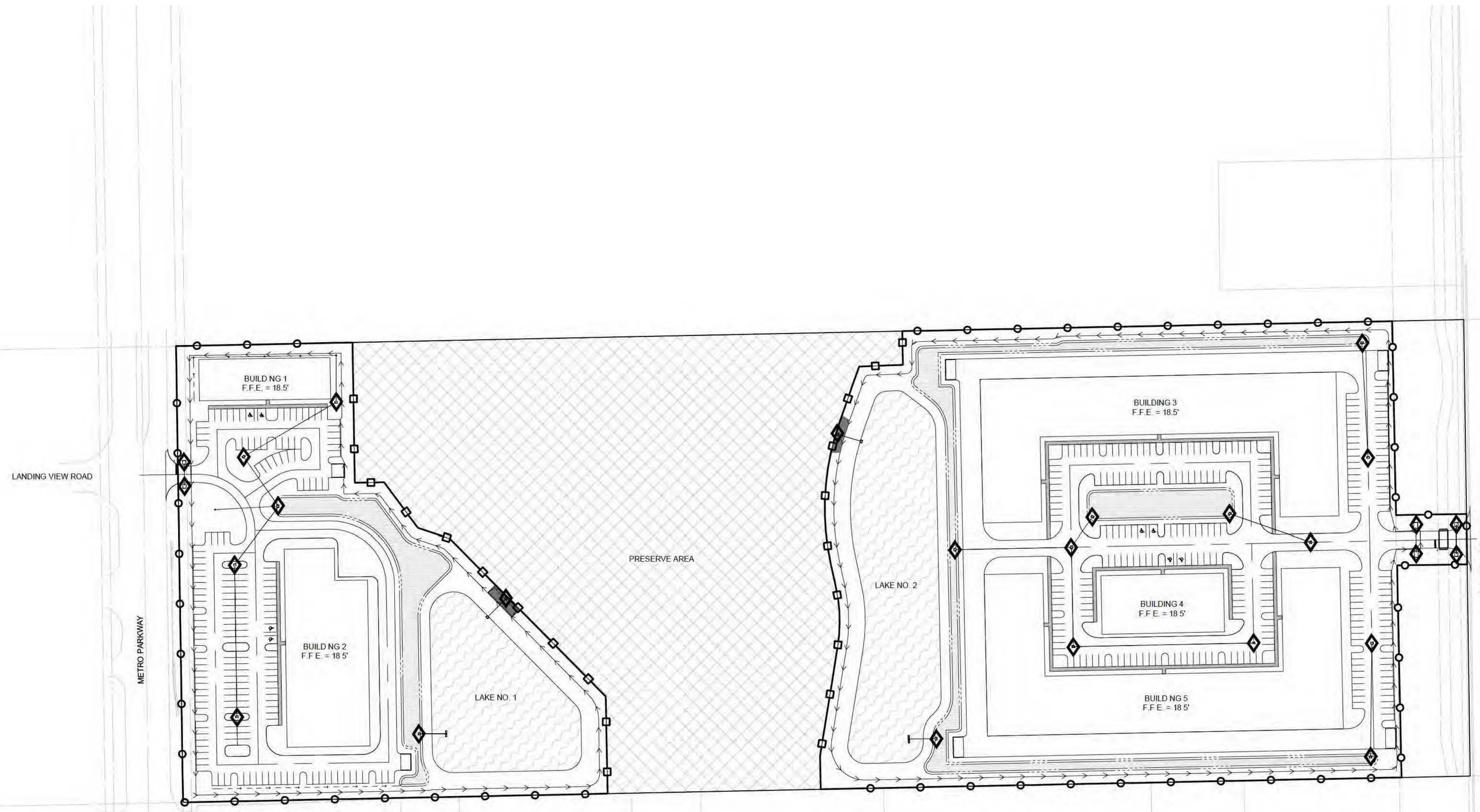
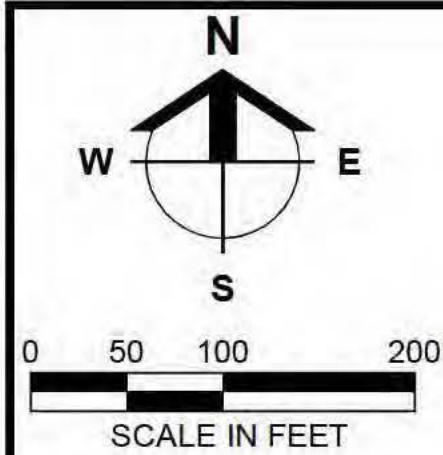
*PAVER BRICKS ARE 8,000 PSI. ECONOCRETE USED FOR COMPARISON ONLY.





**NOTE: NOT ALL NOTES, DETAILS, SYMBOLS
OR OTHER STANDARDS SHOWN ON THIS
SHEET MAY BE APPLICABLE TO THIS PROJECT**





Barraco
and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING
www.barraco.net
2271 MCGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-8940

PREPARED FOR

Land Solutions
inc.
6810 INTERNATIONAL CENTER BLVD.
FORT MYERS, FL 33912
PHONE (239) 482-1500
FAX (239) 481-8477
WWW.LANDSOLUTIONS.NET

PROJECT DESCRIPTION

**METRO
28**

LEE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, P.E., FOR THE FIRM
FLORIDA P.E. NO. 38536 - CARLB@BARRACO.NET

DRAWING NOT VALID WITHOUT SEAL, SIGNATURE AND DATE
© COPYRIGHT 2019, BARRACO AND ASSOCIATES, INC.
REPRODUCTION, CHANGES OR ASSIGNMENTS ARE PROHIBITED

F.I.E. NAME	23610A52.DWG
LOCATION	J:\23610\DWG\ERPI
PLOT DATE	FRI. 10-4-2019 - 9:42 AM
PLOT BY	CHRIS PAULY

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS
APPROVAL SUBMITTAL PLANS 10/01/2019

STORMWATER POLLUTION PREVENTION PLAN	
PROJECT / F.I.E. NO.	SHEET NUMBER
23610	C8.0