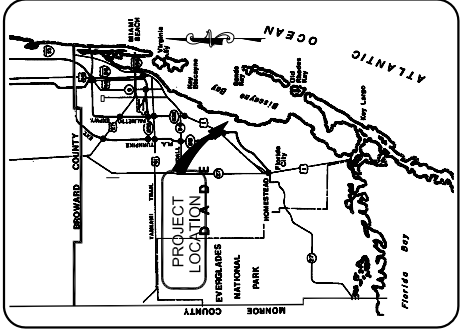




TOWN OF CUTLER BAY KAYAK DOCK, CANOE LAUNCH AND PARKING LOT

LAKES BY THE BAY
8551 SW 216 STREET
TOWN OF CUTLER BAY, FLORIDA

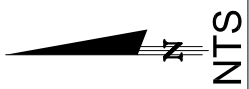
PROJECT LOCATION



VICINITY MAP



LOCATION MAP



- TOWN COUNCIL:
- PEGGY R. BELL

SUE ELLEN LOYZELLE

MARY ANN MIXON

MICHAEL P. CALLAHAN

ROGER CORIAT
- MAYOR
- VICE-MAYOR
- COUNCILMEMBER
- COUNCILMEMBER
- COUNCILMEMBER

TOWN ADMINISTRATION:

RAFAEL G. CASALS

MITCHELL A. BIERMAN

DEBRA E. EASTMAN

TOWN MANAGER

TOWN ATTORNEY

TOWN CLERK

PUBLIC WORKS DEPARTMENT:

ALFREDO QUINTERO JR.

DIRECTOR OF PUBLIC WORKS

BY:

MARLIN

ROXANA P MATAMOROS, P.E.
LIC No. 77979

1700 NW 66 Ave., Ste. 106 • Plantation, FL 33313
(305) 477-7575 • C.A. No. 6104

DATE: _____

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.

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
C-1	COVER SHEET
C-2	GENERAL NOTES
C-3	EXISTING CONDITION
C-4	BASELINE LAYOUT PLAN
C-5	GEOMETRY AND SIGNAGE PLAN
C-6	GRADING PLAN AND DETAILS
C-7	BODPAVE AND PARKING DETAILS
C-8	SHELTER PLAN
C-9	SHELTER DETAILS
C-10	EROSION CONTROL NOTES
C-11	EROSION CONTROL DETAIL
C-12	TABULATION OF QUANTITIES

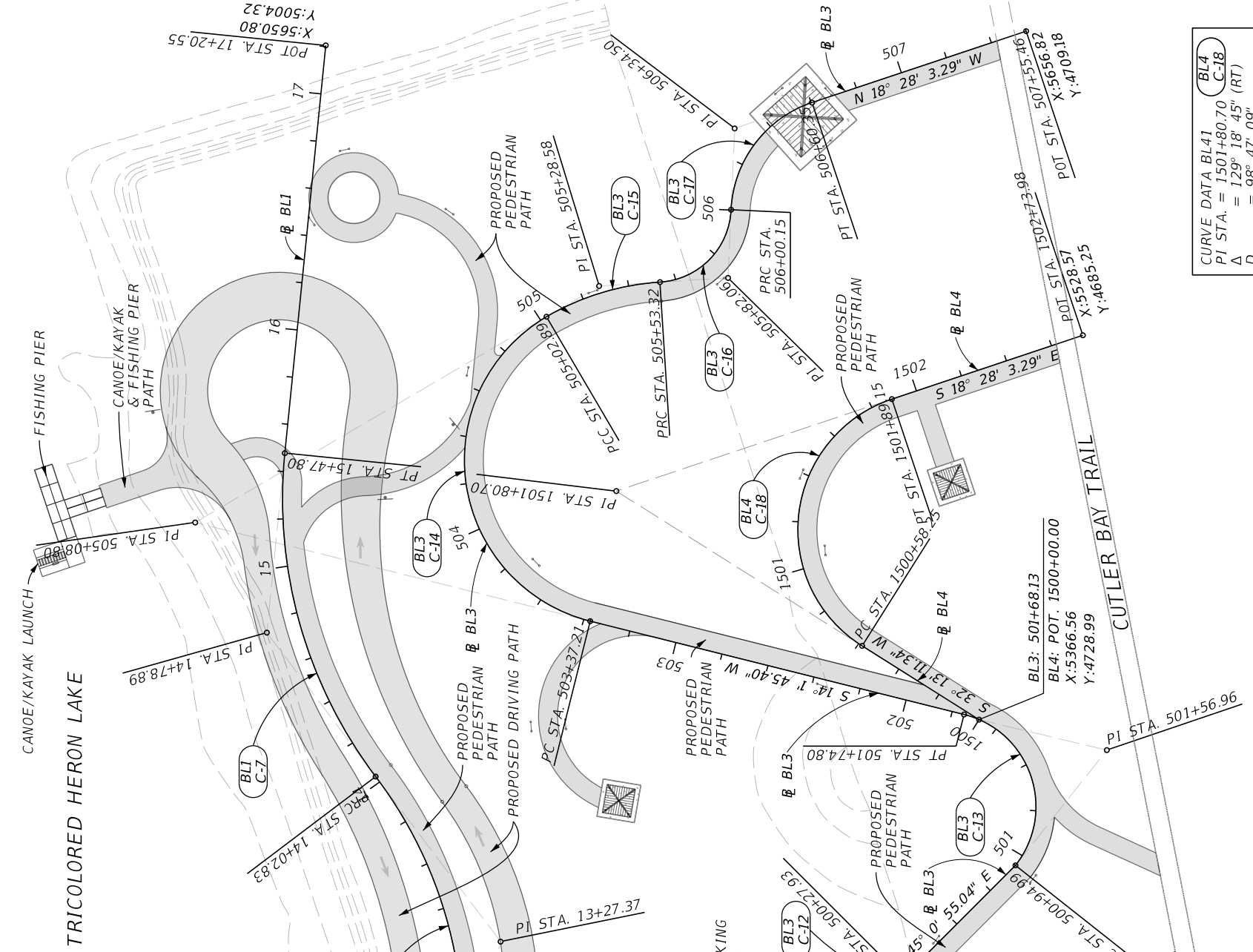
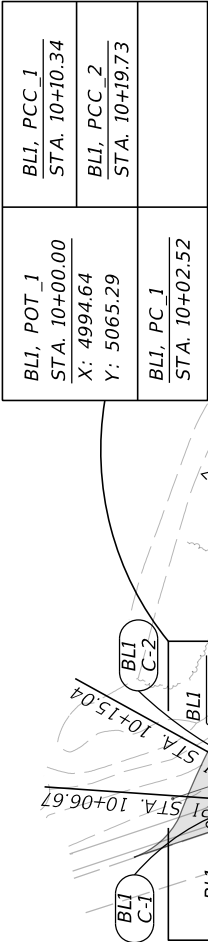
GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE LATEST STANDARDS, CODES AND SPECIFICATIONS OF MIAMI-DADE COUNTY.
- 2.THE LOCATIONS OF EXISTING RIGHT-OF-WAY LINES, CENTERLINES, ROADWAY PAVEMENT, UTILITIES, TREES AND OTHER PHYSICAL ABOVE-GROUND FEATURES SHOWN ON THE PLANS WERE TAKEN FROM THE SPECIFIC PURPOSE SURVEYS PREPARED BY:
MARLIN ENGINEERING, INC.
15802 SW 200th, ST.
MIAMI, FLORIDA 33187
TEL: (305) 477-7575
3. EXISTING SECTION CORNERS AND 1/4 SECTION CORNERS, AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE REFERENCED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND RESET AFTER CONSTRUCTION USING A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA.
4. ANY NGVD - 1929 MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, NOTIFY: GEODETTIC INFORMATION CENTER
ATT: MARK MAINTENANCE SECTION MCGG-162
6001 EXECUTIVE BLVD.
ROCKVILLE, MARYLAND 20852
TEL: (301) 443-8319
5. EXISTING LAND MARKERS WITHIN LIMITS OF CONSTRUCTION SHALL BE REFERENCED IF DISTURBED BY THE CONTRACTOR'S SURVEY PARTY UNDER THE DIRECTION OF A FLORIDA REGISTERED LAND SURVEYOR.
6. ITEMS IN CONFLICT WITH DESIGN SUCH AS EXISTING CURBS AND GUTTERS, SIDEWALKS, DRAINAGE STRUCTURES, PAVEMENT BASE AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE UNLESS THE ITEMS ARE TO BE REUSED ON THE PROJECT.
7. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED PRIOR TO BIDDING, TO CONDUCT ANY INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE SITE CONDITIONS OF THE PROJECT AND FULLY SATISFY HIMSELF OF BOTH THE SURFACE AND SUBSURFACE CONDITIONS AND BASE HIS PRICING ACCORDINGLY.
8. THE LOCATION OF UNDERGROUND UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. RELOCATION OF UTILITIES SHALL BE COORDINATED WITH UTILITY COMPANIES BY THE CONTRACTOR AFTER IDENTIFICATION OF CONFLICT. CONTRACTOR SHALL NOTIFY ENGINEER IN ADVANCE BEFORE ANY RELOCATION.
9. THE CONTRACTOR SHALL CALL SUNSHINE (1-800-432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH HE FAILS TO REQUEST LOCATIONS. HE IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.
10. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING FACILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF FIELD SURVEY. THE CONTRACTOR SHALL CONFIRM THE ELEVATIONS AND OTHER FEATURES AFFECTING FISHER WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. THE CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER.
11. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND LOCAL SAFETY AND HEALT REGULATIONS.

13. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF SOIL CONDITIONS THROUGHOUT THIS PROJECT. ANY SPECIAL EQUIPMENT SHORING, SHEETING OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY, EITHER PUBLIC OR PRIVATE, DURING EXCAVATION OF SUBSOIL MATERIAL OR DURING THE FILLING OF ANY AREA, OR FOR ANY OPERATION DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
14. THE CONTRACTOR SHALL COORDINATE WITH UTILITIES TO ARRANGE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC, AS NECESSARY TO COMPLETE THE WORK.
15. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.
16. STAGING AND MATERIAL STORAGE SHALL NOT BE CONDUCTED ON ABUTTING PRIVATE PROPERTY OR PUBLIC R-O-W WITHOUT APPROVAL FROM THE TOWN.
17. APPARENT ERRORS, DISCREPANCIES, OR OMISSIONS ON THE DRAWING SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BEFORE THE BIDDING. NO EXTRA PAYMENT WILL BE ALLOWED FOR ANY WORK REQUIRED DUE TO MISUNDERSTANDING OF JOB OR SITE CONDITIONS AFFECTING THE WORK AS DESCRIBED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL NOT TAKE ADVANTAGE OF ANY APPARENT ERROR OR OMISSION IN DRAWINGS OR SPECIFICATIONS, AND THE ENGINEER SHALL BE PERMITTED TO MAKE CORRECTIONS AND INTERPRETATIONS AS MAY BE DEEMED NECESSARY FOR FULFILLMENT OF THE INTENT OF THE CONTRACT DOCUMENTS. THE TENDERING OF A PROPOSAL WILL ACKNOWLEDGE ACCEPTANCE OF THESE CONDITIONS BY THE BIDDER.
18. THE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT COMPANY REPRESENTATIVE CAN BE PRESENT.
19. THE CONTRACTORS IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
20. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
21. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES THAT REMAIN IN PLACE.
22. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, SIDEWALKS, ETC., WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE TOWN.
23. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT.

R E V I S I O N S				GENERAL NOTES				TOWN OF CUTLER BAY KAYAK DOCK, CANOE LAUNCH AND PARKING LOT DESIGN				SEAL	SHEET
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	NAME	DATE	NAME	DATE	NAME	DATE		
						DESIGNED BY		DRAWN BY					
						CHECKED BY		CHECKED BY					
						SUPERVISED BY							

MARLIN
ENGINEERING
17100 NW 66 Ave., Ste. 106 • Plantation, FL 33313
(305) 477-7575 • C.A. No. 6104
ROXANA P. MATAMOROS, P.E. NO. 77979



TRICOLORED HERON LAKE

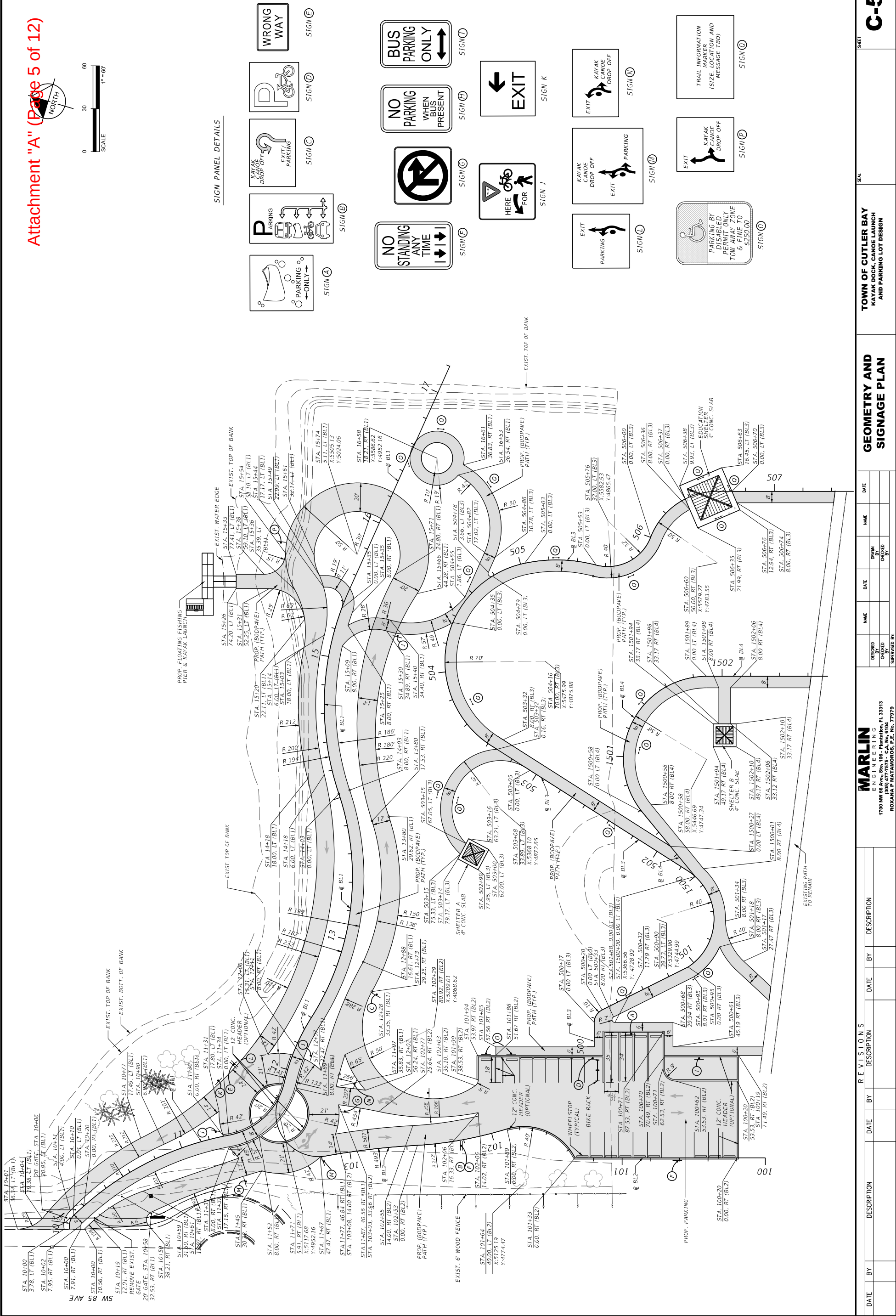
Attachment "A" (Page 4 of 12)

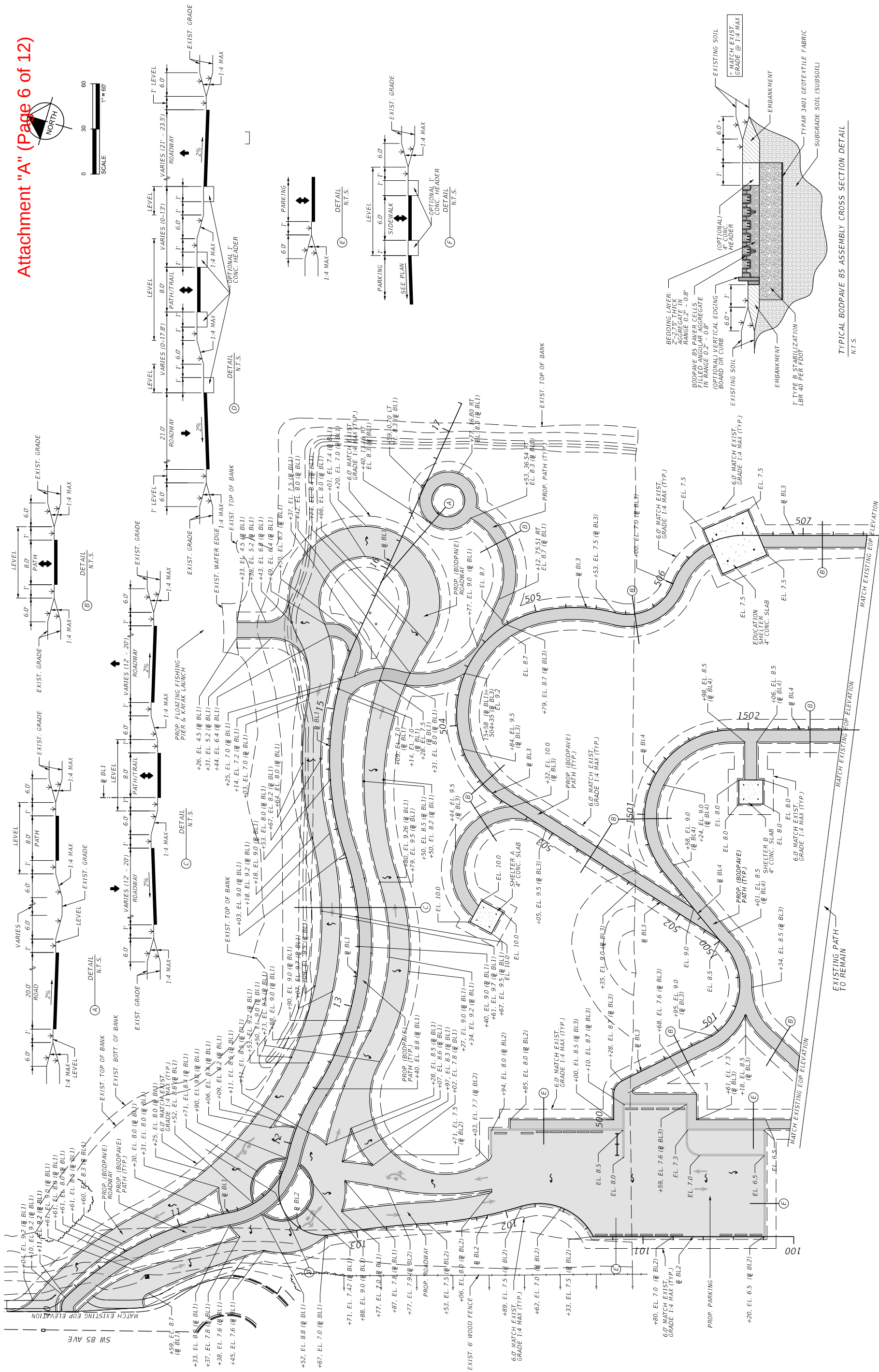
CURVE DATA BL11 PI STA. = 10+06.67 Δ = 47° 11' 44" (RT) D = 603° 06' 48" T = 4.15 L = 7.83 R = 9.50 PC STA. = 10+02.52 PT STA. = 10+10.34	CURVE DATA BL15 PI STA. = 12+15.91 Δ = 19° 50' 26" (RT) D = 40° 33' 22" T = 24.71 L = 48.92 R = 141.28 PC STA. = 11+91.20 PT STA. = 12+40.12
CURVE DATA BL12 PI STA. = 10+15.04 Δ = 2° 40' 20" (RT) D = 28° 27' 25" T = 4.70 L = 9.39 R = 201.34 PC STA. = 10+10.34 PT STA. = 10+19.73	CURVE DATA BL16 PI STA. = 13+27.37 Δ = 51° 13' 25" (LT) D = 31° 28' 52" T = 87.25 L = 162.71 R = 182.00 PC STA. = 12+40.12 PT STA. = 14+02.83
CURVE DATA BL13 PI STA. = 10+78.37 Δ = 31° 14' 12" (RT) D = 27° 18' 50" T = 58.64 L = 114.36 R = 209.77 PC STA. = 10+19.73 PT STA. = 11+34.09	CURVE DATA BL17 PI STA. = 14+78.89 Δ = 42° 48' 57" (RT) D = 29° 32' 02" T = 76.06 L = 144.97 R = 194.00 PC STA. = 14+02.83 PT STA. = 15+47.80
CURVE DATA BL14 PI STA. = 11+66.39 Δ = 66° 46' 20" (LT) D = 116° 55' 49" T = 32.29 L = 57.10 R = 49.00 PC STA. = 11+34.09	

CURVE DATA BL31 PI STA. = 500+23.03 Δ = 63° 27' 45" (RT) D = 572° 57' 28" T = 6.18 L = 11.08 R = 10.00 PC STA. = 500+16.85 PT STA. = 500+27.93	CURVE DATA BL35 PI STA. = 505+82.06 Δ = 83° 50' 48" (LT) D = 179° 02' 58" T = 28.74 L = 46.83 R = 32.00 PC STA. = 505+53.32 PT STA. = 506+00.15
CURVE DATA BL32 PI STA. = 501+56.96 Δ = 114° 19' 13" (LT) D = 143° 14' 22" T = 61.97 L = 79.81 R = 40.00 PC STA. = 500+94.99 PT STA. = 501+74.80	CURVE DATA BL36 PI STA. = 506+34.50 Δ = 68° 58' 46" (RT) D = 114° 35' 30" T = 34.35 L = 60.20 R = 50.00 PC STA. = 506+00.15 PT STA. = 506+60.35
CURVE DATA BL33 PI STA. = 505+08.80 Δ = 135° 36' 51" (RT) D = 81° 51' 04" T = 171.59 L = 165.68 R = 70.00 PC STA. = 503+37.21 PT STA. = 505+02.89	
CURVE DATA BL34 PI STA. = 505+28.58 Δ = 26° 45' 22" (RT) D = 53° 03' 06" T = 25.69 L = 50.43 R = 108.00 PC STA. = 505+02.89 PT STA. = 505+53.32	

CURVE DATA BL41 PI STA. = 1501+80.70 Δ = 129° 18' 45" (RT) D = 98° 47' 09" T = 122.46 L = 130.90 R = 58.00 PC STA. = 1500+58.25 PT STA. = 1501+89.15	
---	--

CURVE DATA BL21 PI STA. = 101+67.01 Δ = 76° 50' 04" (LT) D = 143° 14' 22" T = 31.72 L = 53.64 R = 40.00 PC STA. = 101+35.29 PT STA. = 101+88.93	CURVE DATA BL22 PI STA. = 102+20.92 Δ = 13° 26' 16" (RT) D = 21° 06' 04" T = 31.99 L = 63.68 R = 271.53 PC STA. = 101+88.93 PT STA. = 102+52.61
CURVE DATA BL23 PI STA. = 102+84.66 Δ = 7° 26' 30" (LT) D = 11° 37' 39" T = 32.04 L = 64.00 R = 492.76 PC STA. = 102+52.61 PT STA. = 103+16.61	CURVE DATA BL24 PI STA. = 103+74.40 Δ = 125° 07' 38" (RT) D = 190° 59' 09" T = 57.79 L = 65.52 R = 30.00 PC STA. = 103+16.61 PT STA. = 103+82.13





N.T.S.

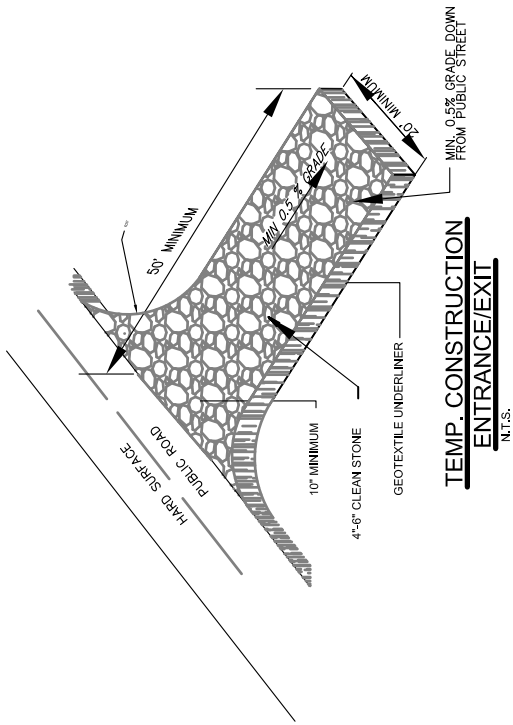
TYPICAL BODPAVE 85 ASSEMBLY CROSS SECTION DETAIL

[illegible]

MARLIN		NAME	DATE	NAME	DATE
ENGINEERING	DESIGNED BY			DRAWN BY	
1700 NW 65 Ave. Ste. 106, Plantation, FL 33313	CHECKED			CHECKED BY	
(904) 477-2575, C.A. No. 6104	SUPERSEDED BY:				
ROXANA P MATANOROS, P.E. NO. 77979					

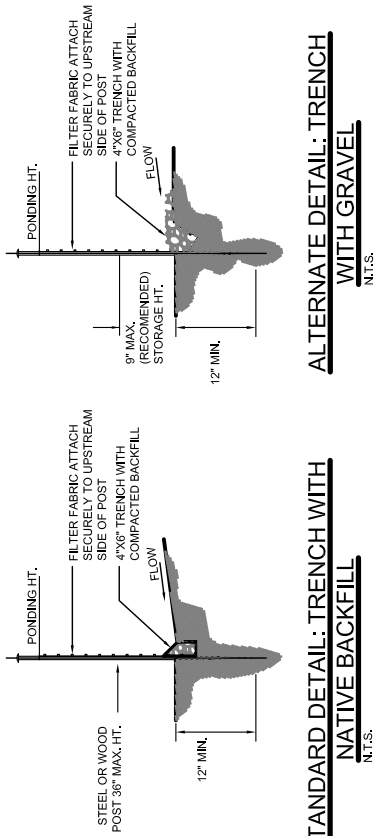
GRADING PLAN AND DETAILS

TOWN OF CUTLER BAY
KAYAK DOCK, CANOE LAUNCH
AND PARKING LOT DESIGN



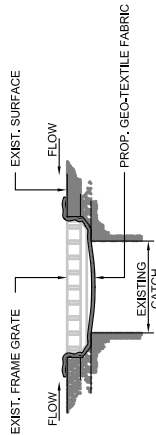
NOTE:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. THE ENTRANCE MUST WIDEN AT ITS CONNECTION TO THE ROADWAY IN ORDER TO ACCOMMODATE THE TURNING RADIIUS OF LARGE TRUCKS.



NOTE:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

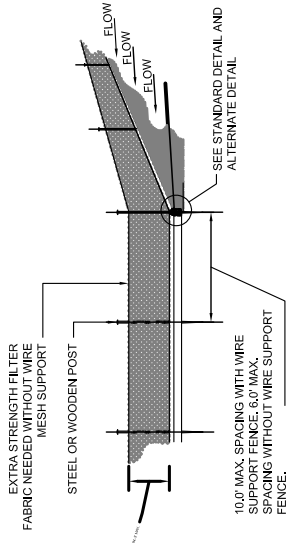


NOTE:

1. CONTRACTOR SHALL PERFORM DAILY INSPECTIONS OF GEO-TEXTILE FABRIC BARRIER AND AS NECESSARY REPLACE OR REPAIR AS REQUIRED, SPECIFICALLY AFTER STORM EVENTS AND LARGE RAINFALL EVENTS.
2. SEDIMENTATION AND DEBRIS THAT ARE REMOVED FROM BARRIERS SHALL BE LEGALLY DISPOSED OF AT AN AUTHORIZED OFF-SITE DISPOSAL FACILITY.

CATCH BASIN EROSION / SEDIMENT CONTROL

N.T.S.



NOTE:

1. CONTRACTOR SHALL PERFORM DAILY INSPECTIONS OF GEO-TEXTILE FABRIC BARRIER AND AS NECESSARY REPLACE OR REPAIR AS REQUIRED, SPECIFICALLY AFTER STORM EVENTS AND LARGE RAINFALL EVENTS.
2. SEDIMENTATION AND DEBRIS THAT ARE REMOVED FROM BARRIERS SHALL BE LEGALLY DISPOSED OF AT AN AUTHORIZED OFF-SITE DISPOSAL FACILITY.

SILT FENCE DETAIL

N.T.S.

R E V I S I O N S					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

WARLIN

ENGINEERING
1700 NW 66 Ave., Ste. 106, Plantation, FL 33313
(305) 477-7575 • C.A. No. 6104
ROXANA P. MATAMOROS, P.E. NO. 77979

TOWN OF CUTLER BAY

KAYAK DOCK, CANOE LAUNCH AND PARKING LOT DESIGN

Fraction Control

ION CON DETAIL

LEHS

1.1

TABULATION OF QUANTITIES				
ITEM	ITEM DESCRIPTION	UNITS	QUANTITY	
GENERAL				
101 1	MOBILIZATION (8%)	LS/	1,000	
102 1	MAINTENANCE OF TRAFFIC	LS/DA	1/1200	
102 60	WORK ZONE SIGN	ED/	180.00	
104 10 3	SEDIMENT BARRIER	LF/	1,000.00	
107 1	LITTER REMOVAL AND DISPOSAL	AC/	2.00	
110 1 1	CLEARING & GRUBBING	LS/AC	1.80	
120 1	REGULAR EXCAVATION (6" AVERAGE DEPTH)	CY/	2,900.00	
120 6	EMBANKMENT	CY/	1,500.00	
570 1 2 / 162 1 12	HARMONIZATION (soil & sod)	SY/	5,420.00	
ROADWAY				
160 4	TYPE B STABILIZATION	SY/	2,516.00	
145 2	GEOTEXTILE FILTER	SY/	2,516.00	
700 1 11	SINGLE POST SIGN, F&I, GRD MTD, (<=)12'	AS/	13	
900	BODYPAVE 85 GRAVER PAVERS	SY/	2,516.00	
901	ANGULAR AGGREGATE (.2"- .8") 1.7" THICK (COLOR TBD)	SY/	2,516.00	
902	GRAVEL BEDDING (2"-2.75")	SY/	2,516.00	
903	SWING GATE (DBL LEAF) ENTRY/EXIT (24')	EA/	2	
904	VERTICAL EDGING CURB (OPTIONAL)	LF/	3,150.00	
SIDEWALK/PATH				
160 4	TYPE B STABILIZATION	SY/	1,906.70	
145 2	GEOTEXTILE FILTER	SY/	1,906.70	
700 1 11	TRAIL INFORMATION MARKER (SIZE/STYLE TBD)	AS/	16	
900	BODYPAVE 85 GRAVER PAVERS	SY/	1,906.70	
901	ANGULAR AGGREGATE (.2"- .8") 1.7" THICK (COLOR TBD)	SY/	1,906.70	
902	GRAVEL BEDDING (2"-2.75")	SY/	1,906.70	
PARKING LOT				
160 4	TYPE B STABILIZATION	SY/	1,375.00	
145 2	GEOTEXTILE FILTER	SY/	1,375.00	
700 1 11	SINGLE POST SIGN, F&I, GRD MTD, (<=)12'	AS/	6	
900	BODYPAVE 85 GRAVER PAVERS	SY/	1,375.00	
901	ANGULAR AGGREGATE (.2"- .8") 1.7" THICK (COLOR TBD)	SY/	1,375.00	
902	GRAVEL BEDDING (2"-2.75")	SY/	1,375.00	
904	VERTICAL EDGING CURB (OPTIONAL)	LF/	695	
905	WHEEL STOPPER	EA/	22	
906	BIKE RACK	EA/	4	
AMENITIES				
1000	SHELTER (24X24)	AS/	1	
1001	SHELTER (12X12)	AS/	1	
1002	CONC. FOOTER (12*1CY/EA) (FOR SHELTERS)	CY/	12	
1003	BRICK FACED ON SHELTER COLUMNS	CY/	18.9	
1004	TABLES	EA/	12	
1005	BENCH	EA/	8	
1006	KAYAK LAUNCH (SINGLE TYPE) (COLOR/STYLE TBD)	AS/	1	
1007	FLOATING FISHING PIER (SIZE/STYLE/COLOR TBD)	AS/	1	