

VILLAGE OF ESTERO

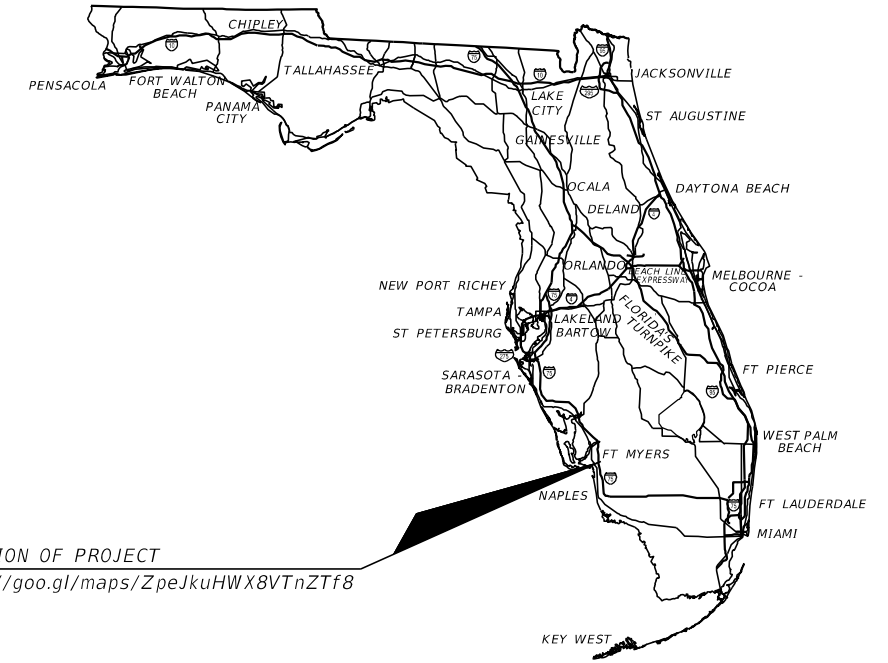
*SANDY LANE BICYCLE/  
PEDESTRIAN IMPROVEMENTS*

*LEE COUNTY, FLORIDA  
COUNTY PROJECT ID# CN 2022-02*

*LANDSCAPE PLANS*

**INDEX OF LANDSCAPE PLANS**

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L-25	IRRIGATION DETAILS



LOCATION OF PROJECT  
<https://goo.gl/maps/ZpeJkuHWX8VTnZTf8>

**100% PLAN SUBMITTAL**

PLANS PREPARED BY:

**ATKINS**

3050 W. COMMERCIAL BLVD, SUITE 350  
FT. LAUDERDALE, FLORIDA 33309  
FBPE CERTIFICATE OF  
AUTHORIZATION NO. 24

LANDSCAPE PLANS  
DESIGNER OF RECORD  
HARRY L. BELTON, RLA  
RLA # 900

FISCAL YEAR	SHEET NO.
2023	LD-1

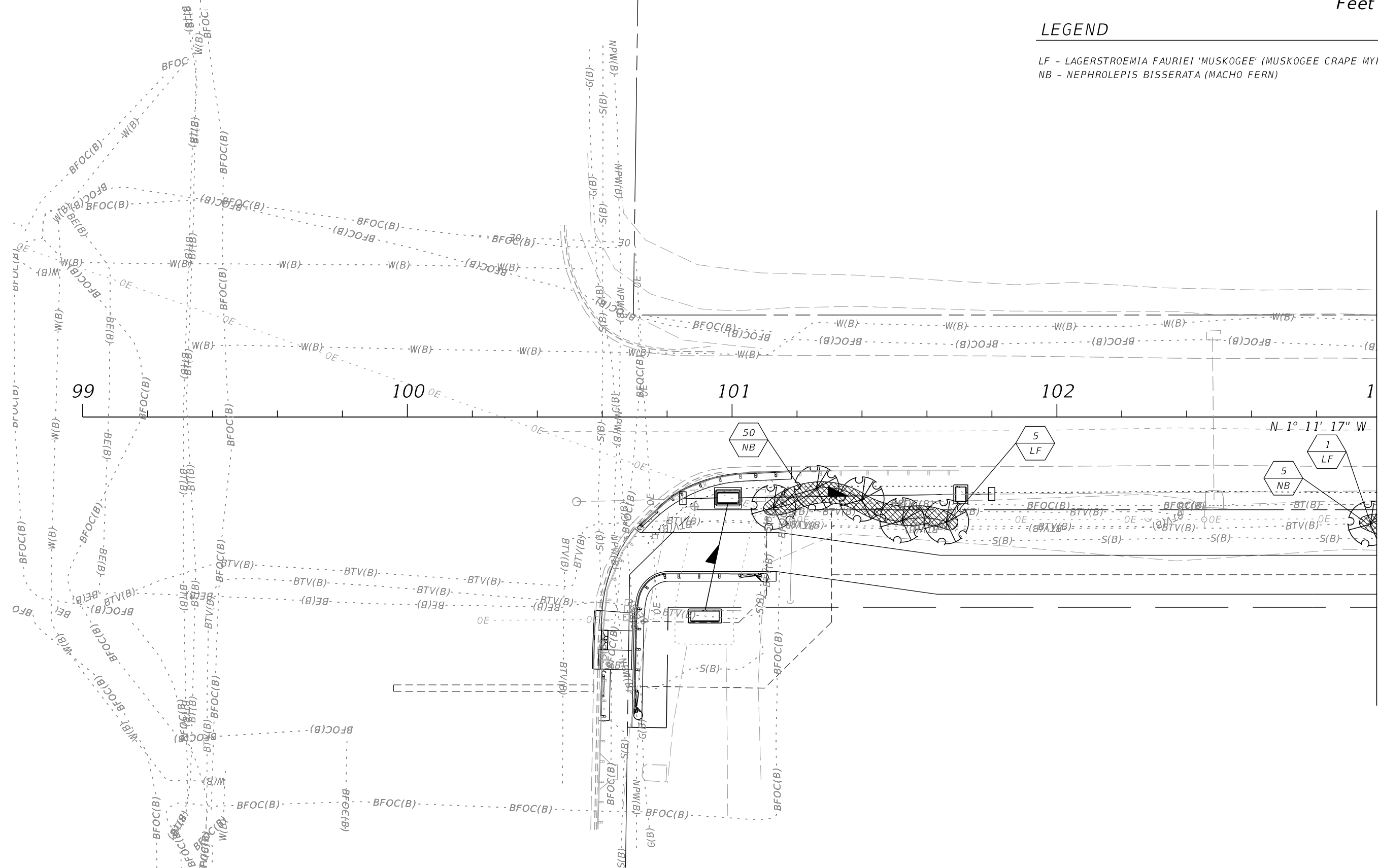


0 7.5 30

Feet

### LEGEND

LF - LAGERSTROEMIA FAURIEI 'MUSKOGEE' (MUSKOGEE CRAPE MYRTLE)  
NB - NEPHROLEPIS BISSERATA (MACHO FERN)



MATCH LINE 103+00

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

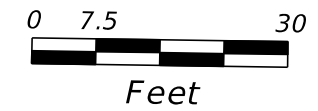
SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



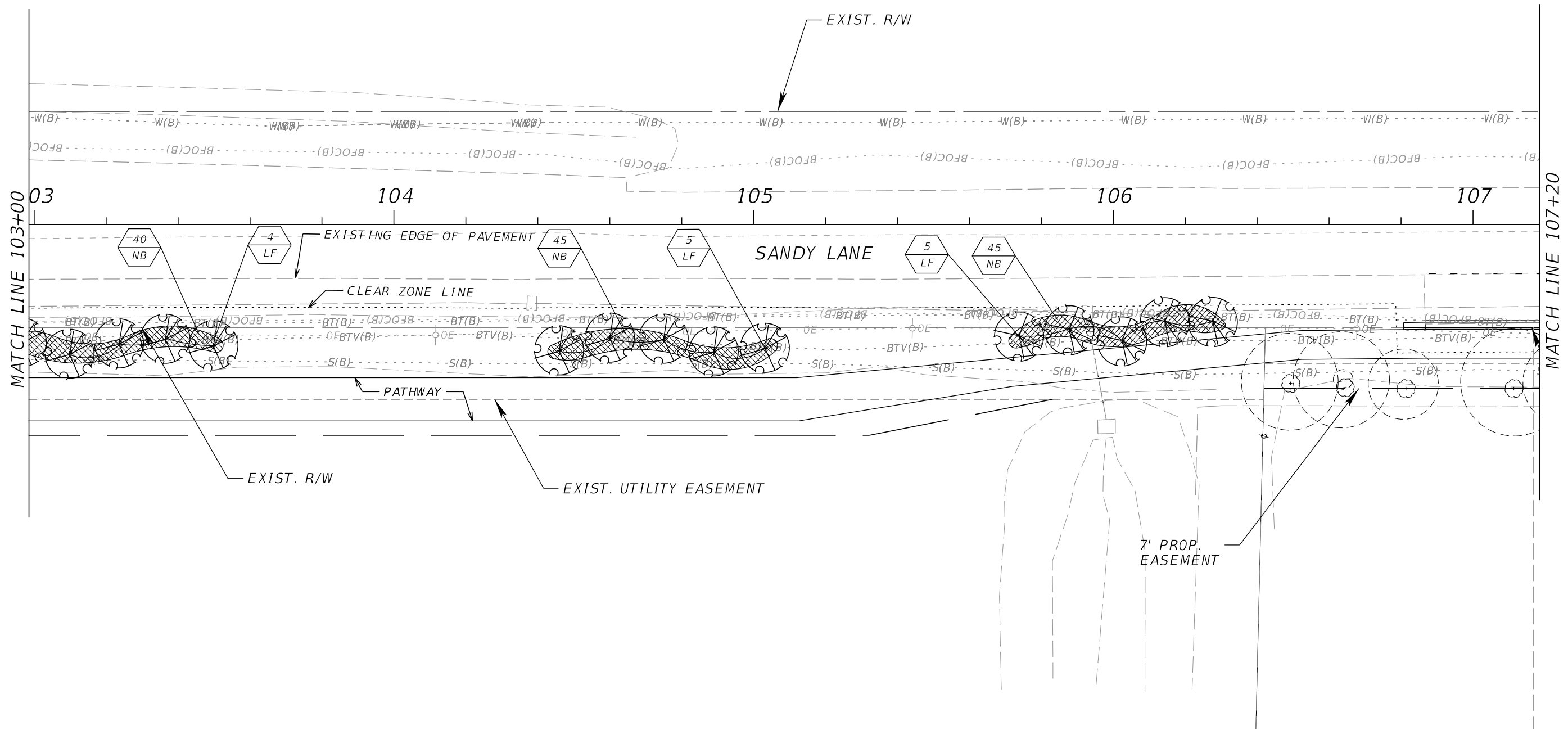
## LANDSCAPE PLAN

SHEET NO.  
LD-2



**LEGEND**

LF - LAGERSTROEMIA FAURIEI 'MUSKOGEE' (MUSKOGEE CRAPE MYRTLE)  
NB - NEPHROLEPIS BISSERATA (MACHO FERN)



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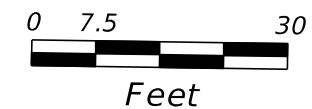
**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02

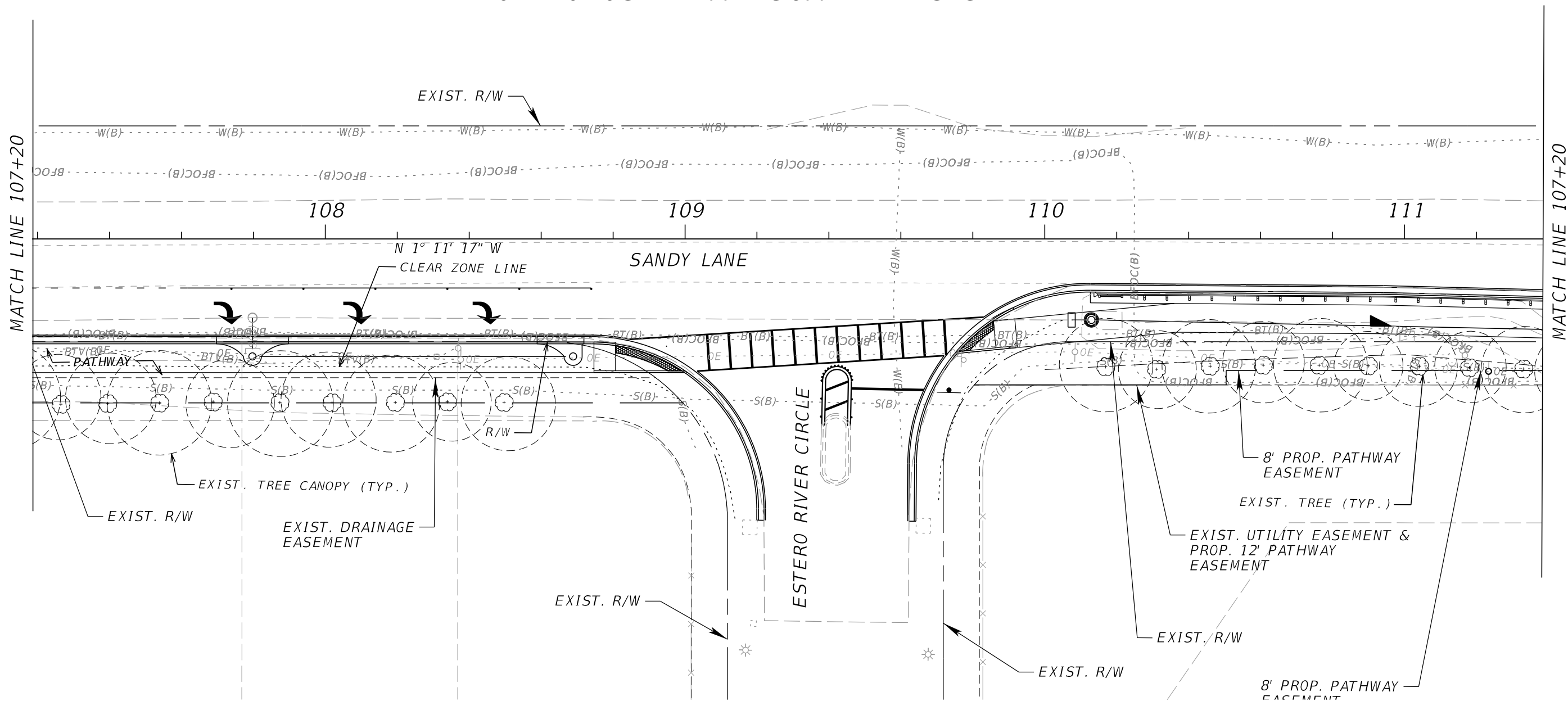


**LANDSCAPE PLAN**

SHEET NO.  
LD-3



NO PROPOSED LANDSCAPE THIS SHEET



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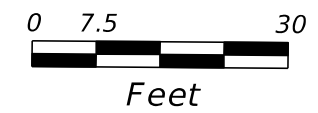
**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

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VILLAGE OF ESTERO	CN 2022-02



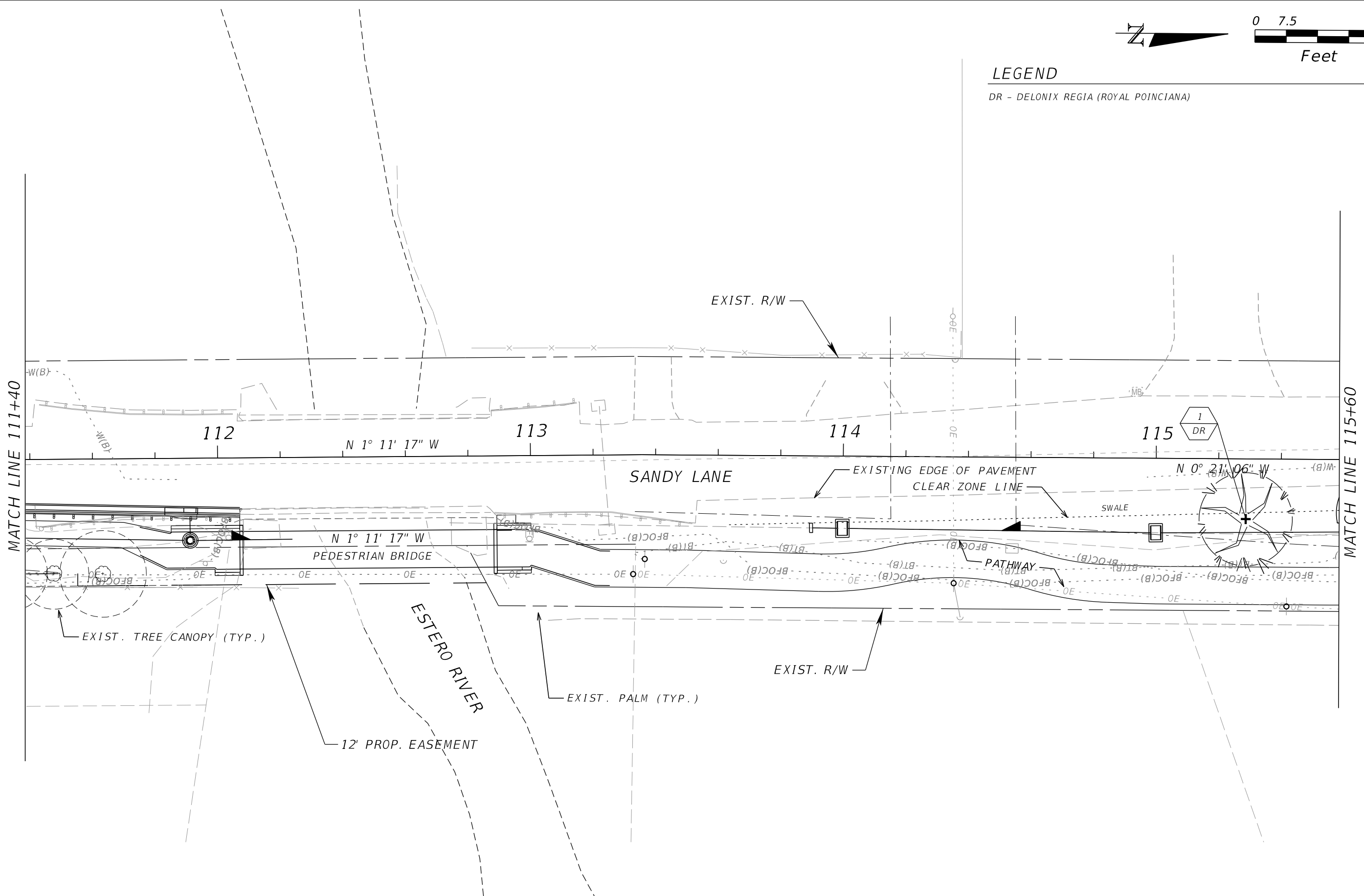
**LANDSCAPE PLAN**

SHEET NO.  
LD-4



**LEGEND**

DR - DELONIX REGIA (ROYAL POINCIANA)



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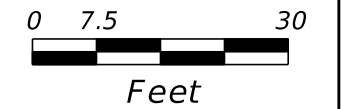
**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

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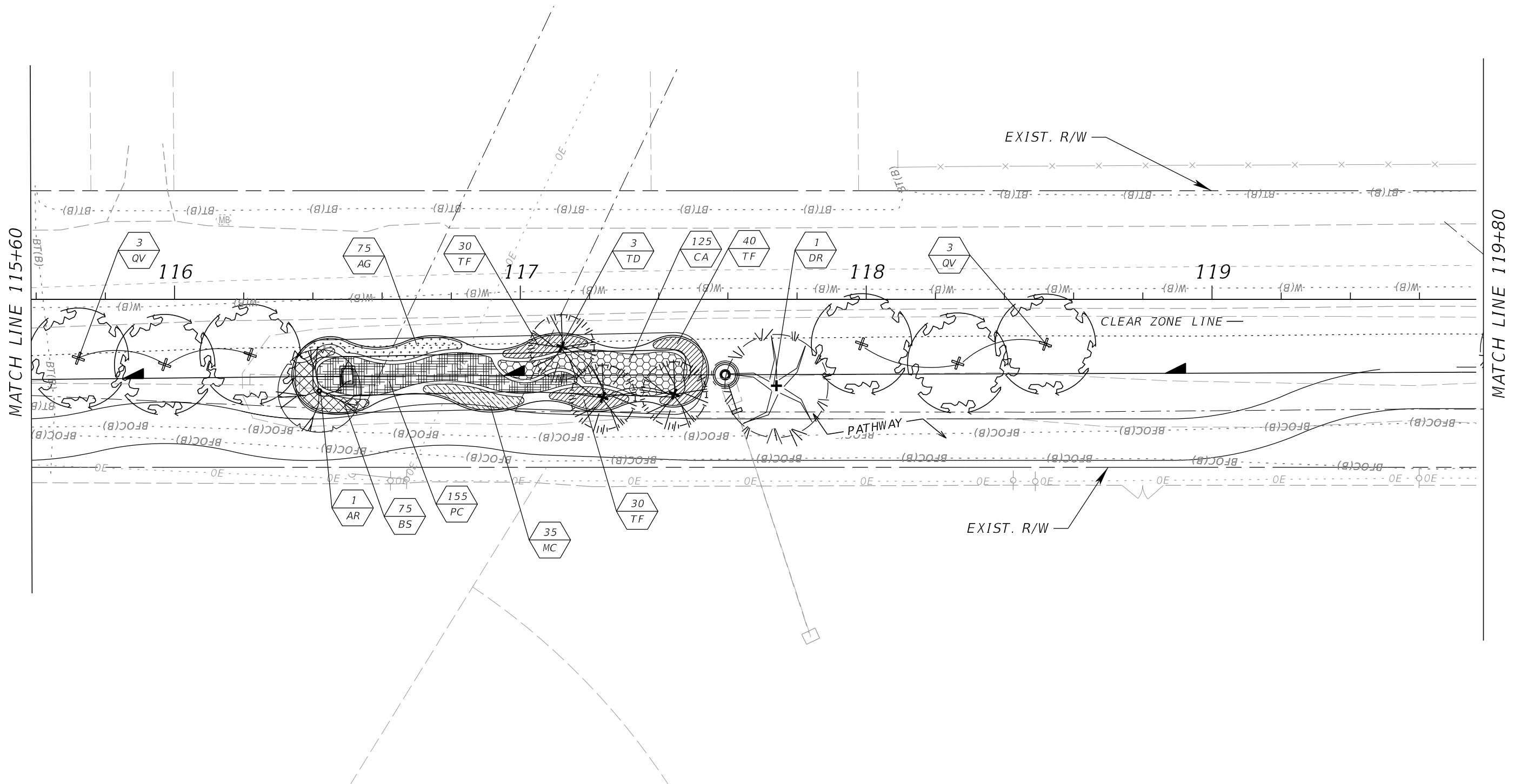
**LANDSCAPE PLAN**

SHEET NO.  
LD-5



### LEGEND

- AR - ACER RUBRUM (RED MAPLE)
- AG - ANDROPOGON GLOMERATUS (BUSHY BLUESTEM)
- CES - CONOCARPUS ERECTUS 'SERICEOUS' (SILVER BUTTWOOD)
- BS - BLECHNUM SERRULATUM (SWAMP FERN)
- DR - DELONIX REGIA (ROYAL POINCIANA)
- CA - CRINUM AMERICANUM (SWAMP LILY)
- LF - LAGERSTROEMIA FAURIEI 'MUSKOGEE' (MUSKOGEE CRAPE MYRTLE)
- MC - MUHLENBURGIA CAPPILLARIS (MUHLY GRASS)
- QV - QUERCUS VIRGINIANA (LIVE OAK)
- PC - PONTEDERIA CORDATA (PICKEREL WEED)
- TD - TAXODIUM DISTICHUM (BALD CYPRESS)
- TF - TRIPSACUM FLORIDANA (FLORIDA GAMA GRASS)



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SANDY LANE MULTI-USE PATH  
ACROSS THE ESTERO RIVER & ALONG BROADWAY

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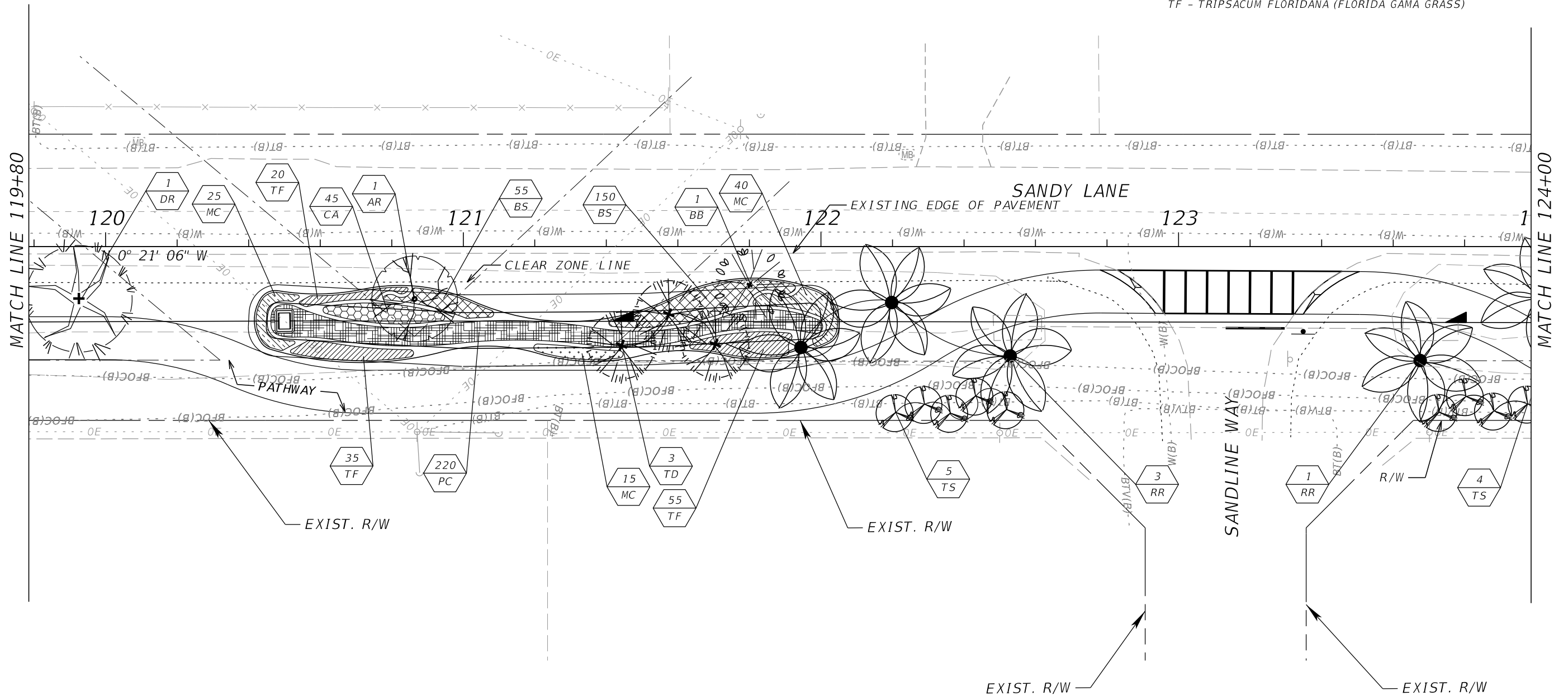


## LANDSCAPE PLAN

SHEET NO.  
LD-6

**LEGEND**

- AR - ACER RUBRUM (RED MAPLE)
- BB - BAUHINIA BLAKEANA (HONG KONG ORCHID)
- CES - CONOCARPUS ERECTUS 'SERICEOUS' (SILVER BUTTWOOD)
- DR - DELONIX REGIA (ROYAL POINCIANA)
- RR - ROYSTONEA REGIA (ROYAL PALM)
- TD - TAXODIUM DISTICHUM (BALD CYPRESS)
- TS - TECOMA STANS (YELLOW ELDER)
  
- AG - ANDROPOGON GLOMERATUS (BUSHY BLUESTEM)
- BS - BLECHNUM SERRULATUM (SWAMP FERN)
- CA - CRINUM AMERICANUM (SWAMP LILY)
- MC - MUHLENBURGIA CAPPILLARIS (MUHLY GRASS)
- PC - PONTEDERIA CORDATA (PICKEREL WEED)
- TF - TRIPSACUM FLORIDANA (FLORIDA GAMA GRASS)



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SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02

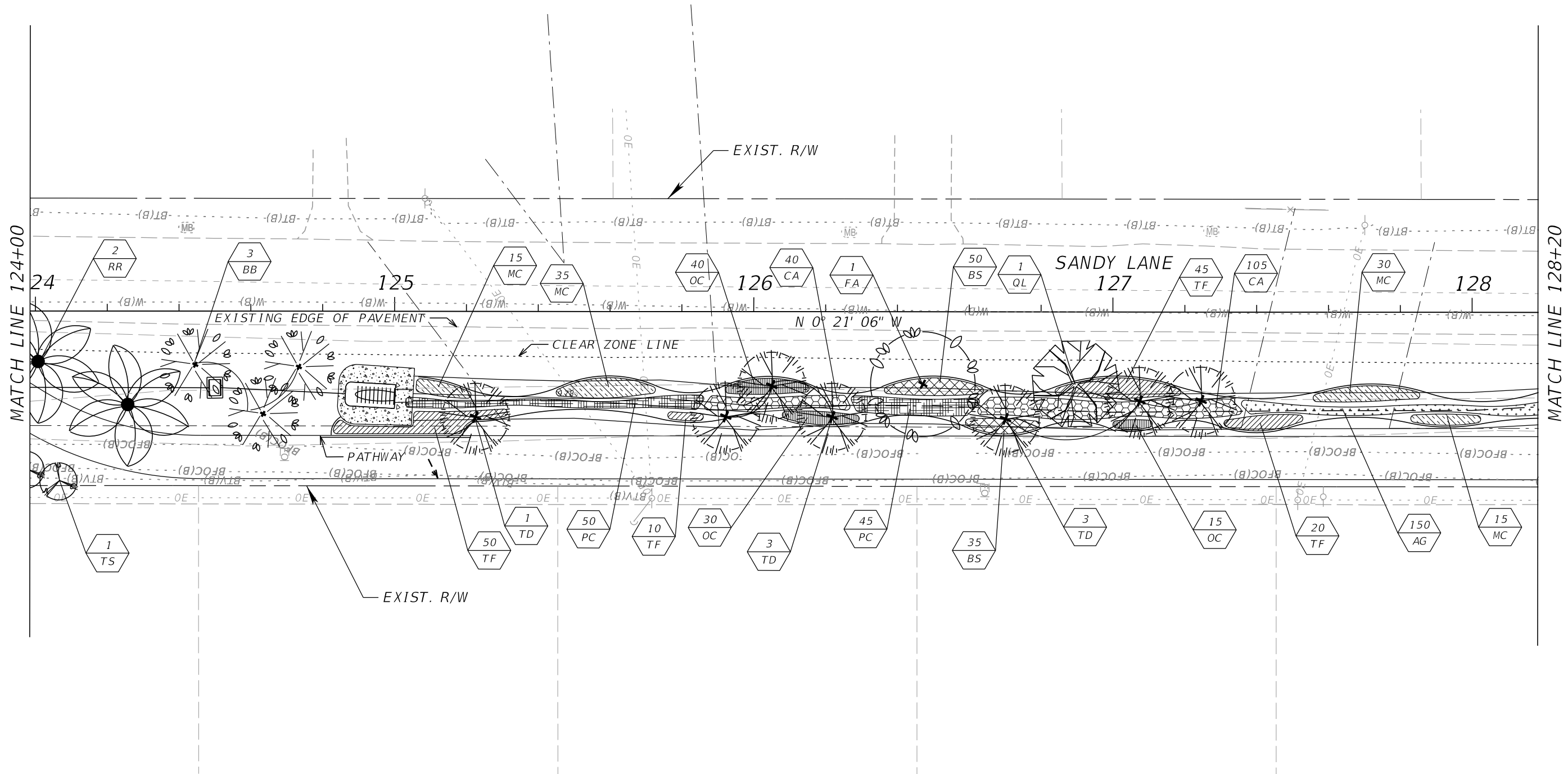



LANDSCAPE PLAN

SHEET NO.  
 LD-7

**LEGEND**

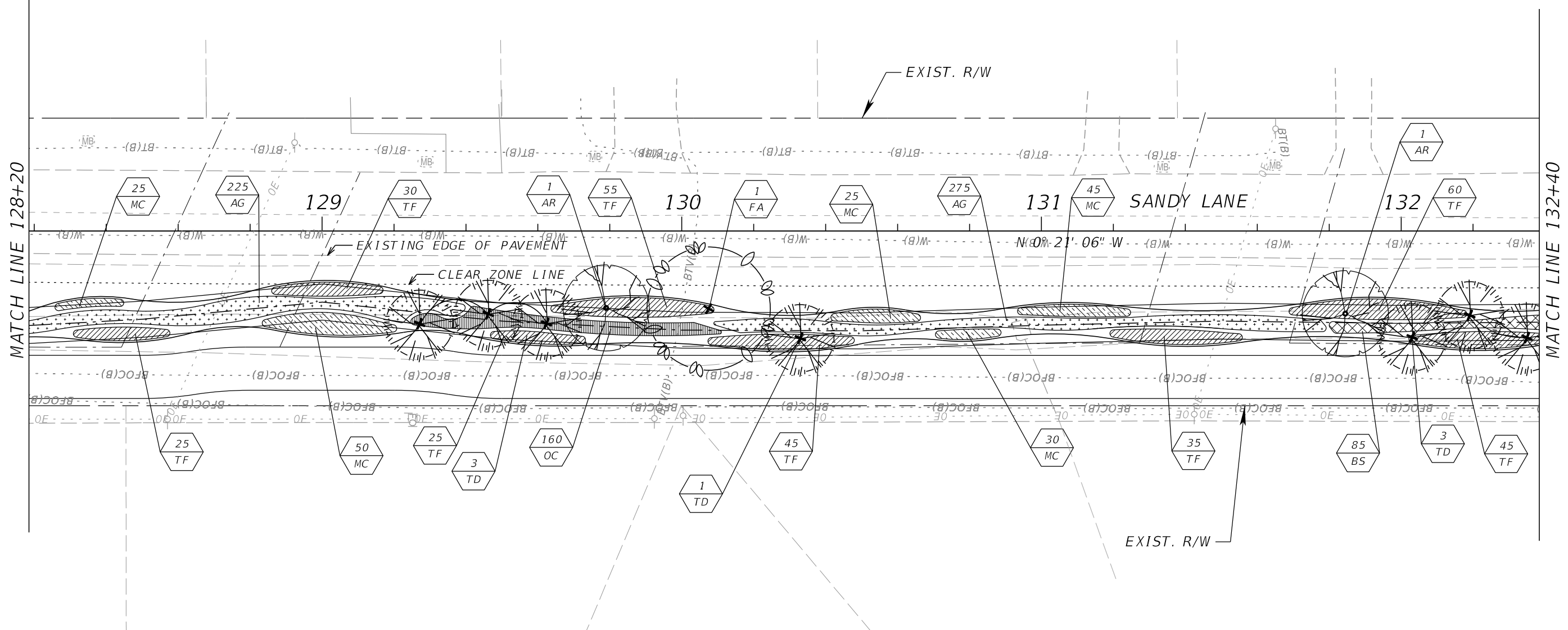
- |  |   |
|--|---|
| BB - BAUHINIA BLAKEANA (HONG KONG ORCHID)<br>FA - FICUS AUREA (STRANGLER FIG)<br>QL - QUERCUS LAURIFOLIA (LAUREL OAK)<br>RR - ROYSTONEA REGIA (ROYAL PALM)<br>TD - TAXODIUM DISTICHUM (BALD CYPRESS)<br>TS - TECOMA STANS (YELLOW ELDER) | AG - ANDROPOGON GLOMERATUS (BUSHY BLUESTEM)<br>BS - BLECHNUM SERRULATUM (SWAMP FERN)<br>CA - CRINUM AMERICANUM (SWAMP LILY)<br>MC - MUHLENBURGIA CAPPILLARIS (MUHLY GRASS)<br>OC - OSMUNDA CINNAMOMEA (CINNAMON FERN)<br>PC - PONTEDERIA CORDATA (PICKEREL WEED)<br>TF - TRIPSACUM FLORIDANA (FLORIDA GAMA GRASS) |
|--|---|



REVISIONS				<div style="text-align: center;"> <h2 style="margin: 0;">ATKINS</h2> <p style="font-size: small; margin: 0;">3250 W. COMMERCIAL BLVD, SUITE 350 FT. LAUDERDALE, FLORIDA 33309 FBPE CERTIFICATE OF AUTHORIZATION NO. 24 HARRY L. BELTON, RLA #900</p> </div>	<div style="text-align: center;"> <p style="font-size: small; margin: 0;">SANDY LANE MULTI-USE PATH ACROSS THE ESTERO RIVER &amp; ALONG BROADWAY</p> </div>			<h2 style="margin: 0;">LANDSCAPE PLAN</h2>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CLIENT	PROJECT #			LD-8
				VILLAGE OF ESTERO	CN 2022-02				



- LEGEND**
- AR - ACER RUBRUM (RED MAPLE)
  - FA - FICUS AUREA (STRANGLER FIG)
  - TD - TAXODIUM DISTICHUM (BALD CYPRESS)
  
  - AG - ANDROPOGON GLOMERATUS (BUSHY BLUESTEM)
  - BS - BLECHNUM SERRULATUM (SWAMP FERN)
  - CA - CRINUM AMERICANUM (SWAMP LILY)
  - MC - MUHLENBURGIA CAPPILLARIS (MUHLY GRASS)
  - OC - OSMUNDA CINNAMOMEA (CINNAMON FERN)
  - PC - PONTEDERIA CORDATA (PICKEREL WEED)
  - TF - TRIPSACUM FLORIDANA (FLORIDA GAMA GRASS)



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SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY

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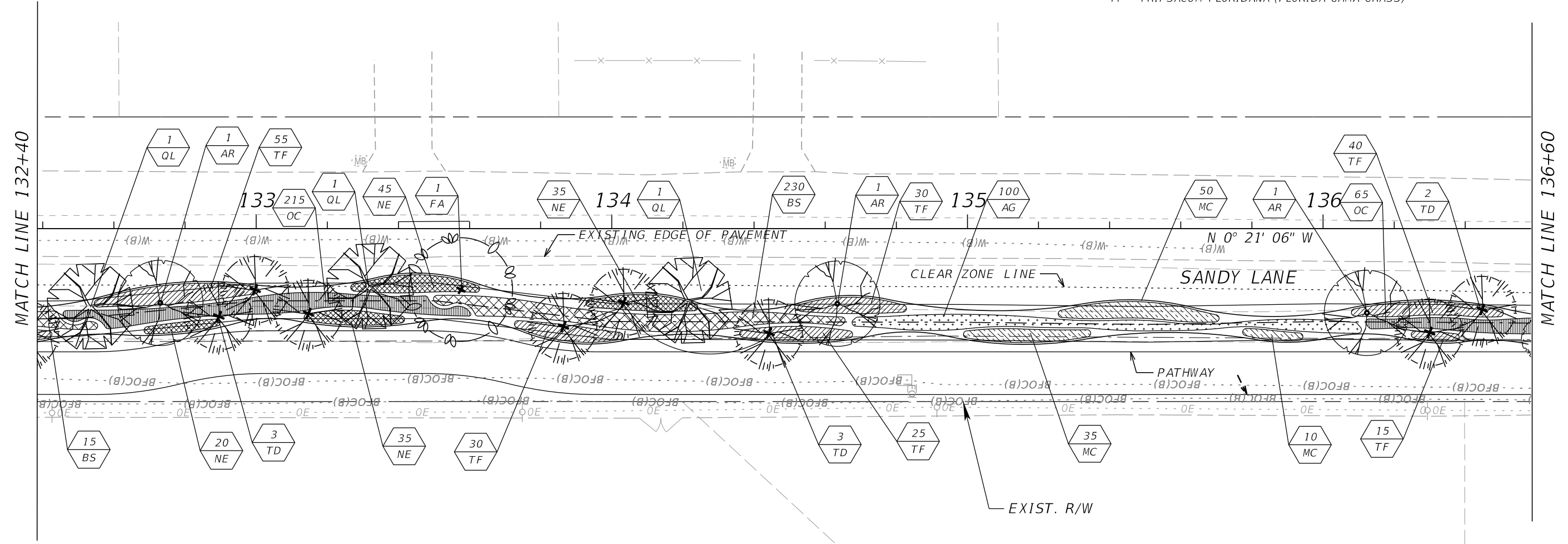


LANDSCAPE PLAN

SHEET NO.  
 LD-9

**LEGEND**

- AR - ACER RUBRUM (RED MAPLE)
- FA - FICUS AUREA (STRANGLER FIG)
- QL - QUERCUS LAURIFOLIA (LAUREL OAK)
- TD - TAXODIUM DISTICHUM (BALD CYPRESS)
  
- AG - ANDROPOGON GLOMERATUS (BUSHY BLUESTEM)
- BS - BLECHNUM SERRULATUM (SWAMP FERN)
- CA - CRINUM AMERICANUM (SWAMP LILY)
- MC - MUHLENBURGIA CAPPILLARIS (MUHLY GRASS)
- OC - OSMUNDA CINNAMOMEA (CINNAMON FERN)
- PC - PONTEDERIA CORDATA (PICKEREL WEED)
- TF - TRIPSACUM FLORIDANA (FLORIDA GAMA GRASS)



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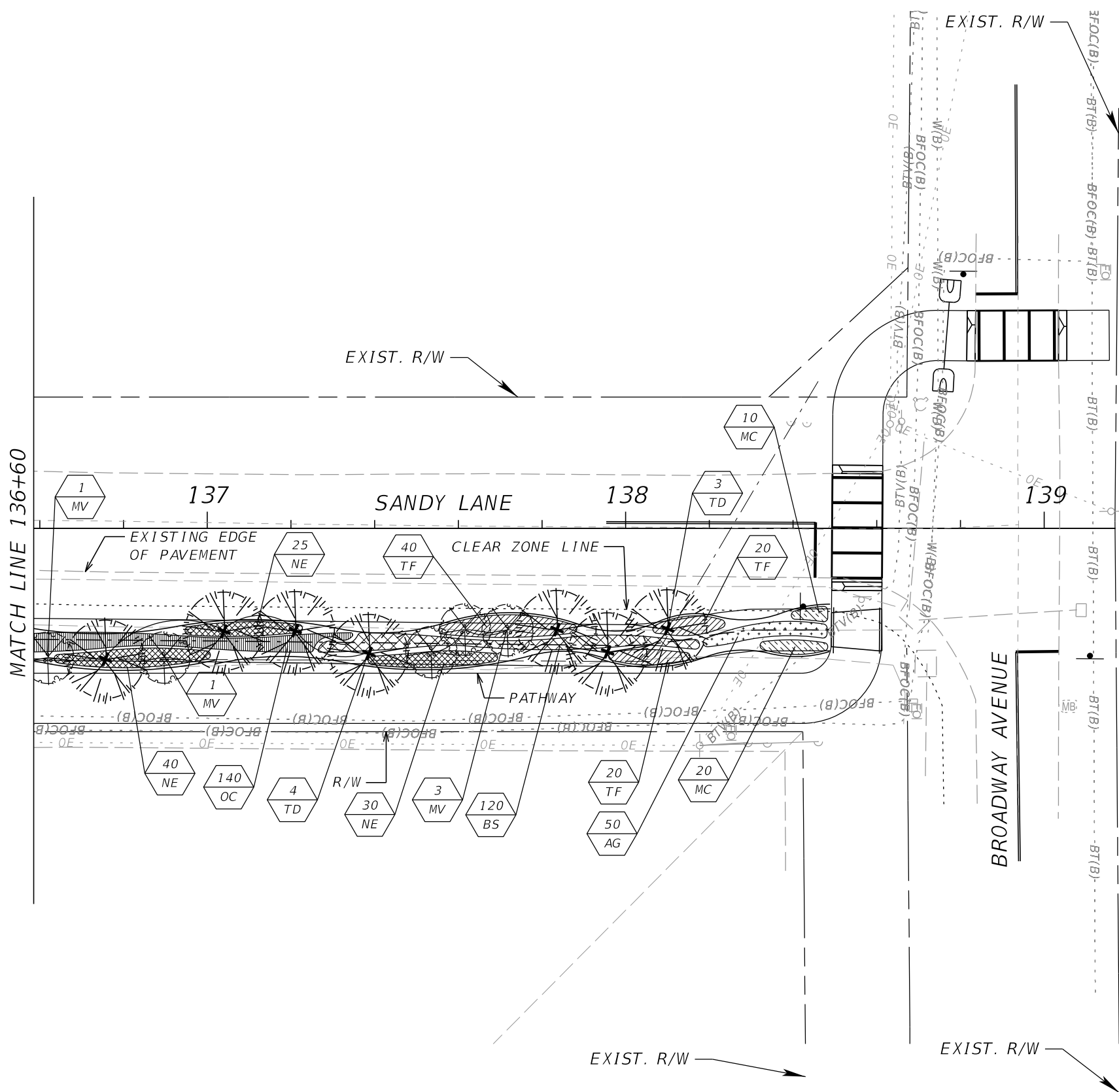
SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



LANDSCAPE PLAN

SHEET NO.  
 LD-10



**LEGEND**

- MV - MAGNOLIA VIRGINIANA (SWEET BAY MAGNOLIA)
- TD - TAXODIUM DISTICHUM (BALD CYPRESS)
  
- BS - BLECHNUM SERRULATUM (SWAMP FERN)
- CA - CRINUM AMERICANUM (SWAMP LILY)
- MC - MUHLENBURGIA CAPPILLARIS (MUHLY GRASS)
- OC - OSMUNDA CINNAMOMEA (CINNAMON FERN)
- PC - PONTEDERIA CORDATA (PICKEREL WEED)
- TF - TRIPSACUM FLORIDANA (FLORIDA GAMA GRASS)

REVISIONS			
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SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



LANDSCAPE PLAN


SHEET NO.  
 LD-11

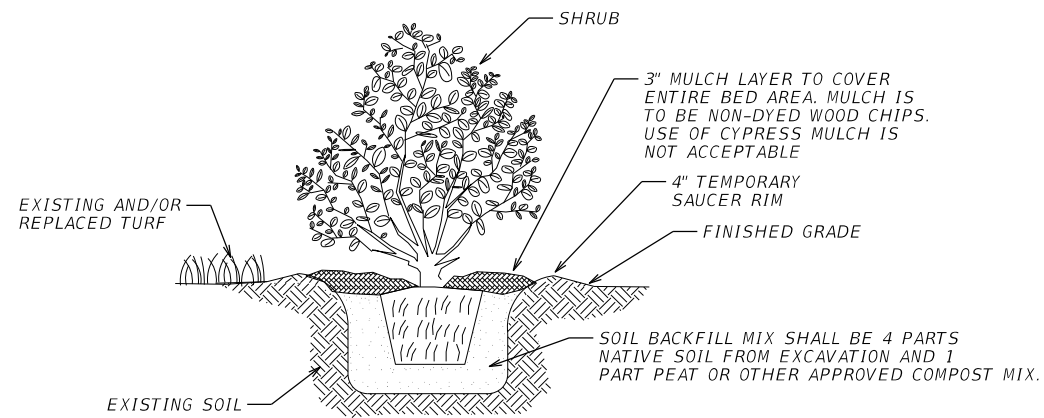
# LANDSCAPE NOTES

- ALL PLANTING TO CONFORM TO ALL APPLICABLE LAWS OF VILLAGE OF ESTERO
- PLANT MATERIAL SHALL MEET OR EXCEED ALL SPECIFICATIONS REGARDING SIZING. IT MAY BE NECESSARY TO EXCEED SOME OF THE SPECIFICATIONS TO MEET THE MINIMUM REQUIREMENTS OF OTHERS.
- PLACEMENT OF ALL PLANT MATERIAL SHALL BE APPROVED BY THE OWNER BEFORE INSTALLATION. ANY PLANT MATERIAL INSTALLED BEFORE APPROVAL WILL BE SUBJECT TO RELOCATION AT THE CONTRACTOR'S EXPENSE.
- ALL TREE PITS SHALL BE FREE OF ROCKS OVER 3/4" IN DIAMETER, STICKS, AND OTHER DEBRIS. CONTRACTOR MUST VERIFY THAT TREE PITS DRAIN PROPERLY. IF WATER IN THE TREE PIT DOES NOT COMPLETELY PERCOLATE INTO THE SOIL WITHIN ONE HOUR, A REMEDY TO TO MEET REQUIRED PERCOLATION MUST BE PROVIDED.
- APPLY AN 8-2-12 FERTILIZER WITH MINOR ELEMENTS TO ALL NEW PLANTING AT THE RATE RECOMMENDED BY THE MANUFACTURER. SUBMIT PROPOSED FERTILIZER FOR APPROVAL BEFORE APPLICATION.
- IT WILL BE THE SOLE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO INSURE THAT ALL NEW PLANTING RECEIVE ADEQUATE WATER DURING INSTALLATION AND THROUGHOUT THE PLANT WARRANTEE PERIODS. DEEP WATERING OF ALL NEW PLANTS AND ANY SUPPLEMENTARY WATERING THAT MAY BE REQUIRED TO AUGMENT NATURAL RAINFALL OR SITE IRRIGATION IS MANDATORY TO INSURE PROPER PLANT DEVELOPMENT AND SHALL BE PROVIDED AS PART OF THIS CONTRACT.
- MULCH SHALL BE NON-DYED HARDWOOD CHIPS FREE OF LEAVES, WEEDS, STICKS OR OTHER DEBRIS. USE OF CYPRESS MULCH IS NOT PERMITTED.
- PRUNING OF EXISTING TREES AS FIELD DIRECTED BY OWNER'S REPRESENTATIVE SHALL BE REQUIRED AND CONDUCTED UNDER THE DIRECT SUPERVISION OF A CERTIFIED ARBORIST IN THE FIELD.
- LANDSCAPE CONTRACTOR SHALL REPAIR, RELOCATE AND/OR REPLACE ANY DAMAGED OR REMOVED LANDSCAPE AFFECTED BY CONSTRUCTION NOT DELINEATED FOR ACTION ON THE DEMOLITION PLANS. CONTRACTOR SHALL OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO ANY REMEDIATION LANDSCAPE EFFORTS.
- SODDING IS REQUIRED FOR ALL AREAS DISTURBED THAT ARE NOT TO RECEIVE LANDSCAPE OR HARDSCAPE. CONTRACTOR SHALL CONFIRM SOD QUANTITY PRIOR TO BID.
- THE CONTRACTOR SHALL WARRANTEE ALL PLANTING AGAINST DEFECT, DISEASE, OR DECLINE FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF INSTALLATION.

LANDSCAPE PLANT SCHEDULE					
KEY	SCIENTIFIC NAME	COMMON NAME	SIZE	REMARKS	QTY.
<u>PALMS</u>					
RR	<i>Rostonea regia</i>	Royal Palm	10' grey wood		6
SP	<i>Sabal palmetto</i>	Sabal Palm	15'-20' C.T.		13
<u>TREES</u>					
AR	<i>Acer rubrum</i>	Red Maple	12' ht. x 5' spr., 2" caliper		7
BB	<i>Bauhinia blakeana</i>	Hong Kong Orchid	10' ht. x 4' spr., 1-1/2" caliper		4
CES	<i>Conocarpus erectus 'sericeus'</i>	Silver Buttonwood	10' ht. x 4' spr., 1-1/2" caliper	standard	17
DR	<i>Delonix regia</i>	Royal Poinciana	12' ht. x 5' spr., 2" caliper		3
FA	<i>Ficus aurea</i>	Strangler Fig	12' ht. x 5' spr., 2" caliper		3
LF	<i>Lagerstroemia fauriei 'muskogee'</i>	Muskogee' Crape Myrtle	10' ht. x 4' spr., 1-1/2" caliper	standard	25
MF	<i>Myrcianthes fragrens</i>	Simpson's Stopper	8' ht. x 4' spr., 1" caliper	standard	3
MV	<i>Magnolia virginiana</i>	Sweetbay Magnolia	10' ht. x 4' spr., 1-1/2" caliper		5
QL	<i>Quercus laurifolia</i>	Laurel Oak	12' ht. x 5' spr., 2" caliper		4
QV	<i>Quercus virginiana</i>	Live Oak	12' ht. x 5' spr., 2" caliper		6
TD	<i>Taxodium distichum</i>	Bald Cypress	12' ht. x 5' spr., 2" caliper		35
TS	<i>Tecoma stans</i>	Yellow Elder	10' ht. x 4' spr., 1-1/2" caliper		10
<u>SHRUBS AND GROUNDCOVER</u>					
AG	<i>Andropogon glomeratus</i>	Bushy Bluestem	12" ht. x 6" spr. (1 gallon)	18" O.C.	330
BS	<i>Blechnum serrulatum</i>	Swamp Fern	8" ht. x 8" spr. (4" liner)	18" O.C.	750
CA	<i>Crinum americanum</i>	Swamp Crinum	8" ht. x 4" spr. (1 gallon)	24" O.C.	855
CVM	<i>Codeaium variegatum "mammey"</i>	Mammey Croton	16" ht. x 12" spr. (3 gallon)	30" O.C.	75
GG	<i>Galphimia glauca</i>	Thryallis	18" ht. x 12" spr. (3 gallon)	48" O.C.	34
HP	<i>Hamelia patens</i>	Firebush	30" ht. x 24" spr. (3 gallon)	36" O.C.	9
MC	<i>Muhlenburgia cappillaris</i>	Muhly Grass	12" ht. x 6" spr. (1 gallon)	24" O.C.	395
NB	<i>Nephrolepis biserrata</i>	Macho Fern	24" ht. x 24" spr. (3 gallon)	36" O.C.	185
NE	<i>Nephrolepis exaltata</i>	Sword Fern	12" ht. x 12" spr. (1 gallon)	24" O.C.	255
OC	<i>Osmunda cinnamomea</i>	Cinnamon Fern	6" ht. x 6" spr. (1 gallon)	18" O.C.	575
PB	<i>Philodendron bipinnatifidum</i>	Splitleaf Philodendron	24" ht. x 24" spr. (3 gallon)	48" O.C.	68
PC	<i>Pontederia cordata</i>	Pickeral Weed	12" ht. x 6" spr. (4" liner)	24" O.C.	980
TF	<i>Tripsacum floridana</i>	Gamma Grass	12" ht. x 6" spr. (1 gallon)	24" O.C.	530

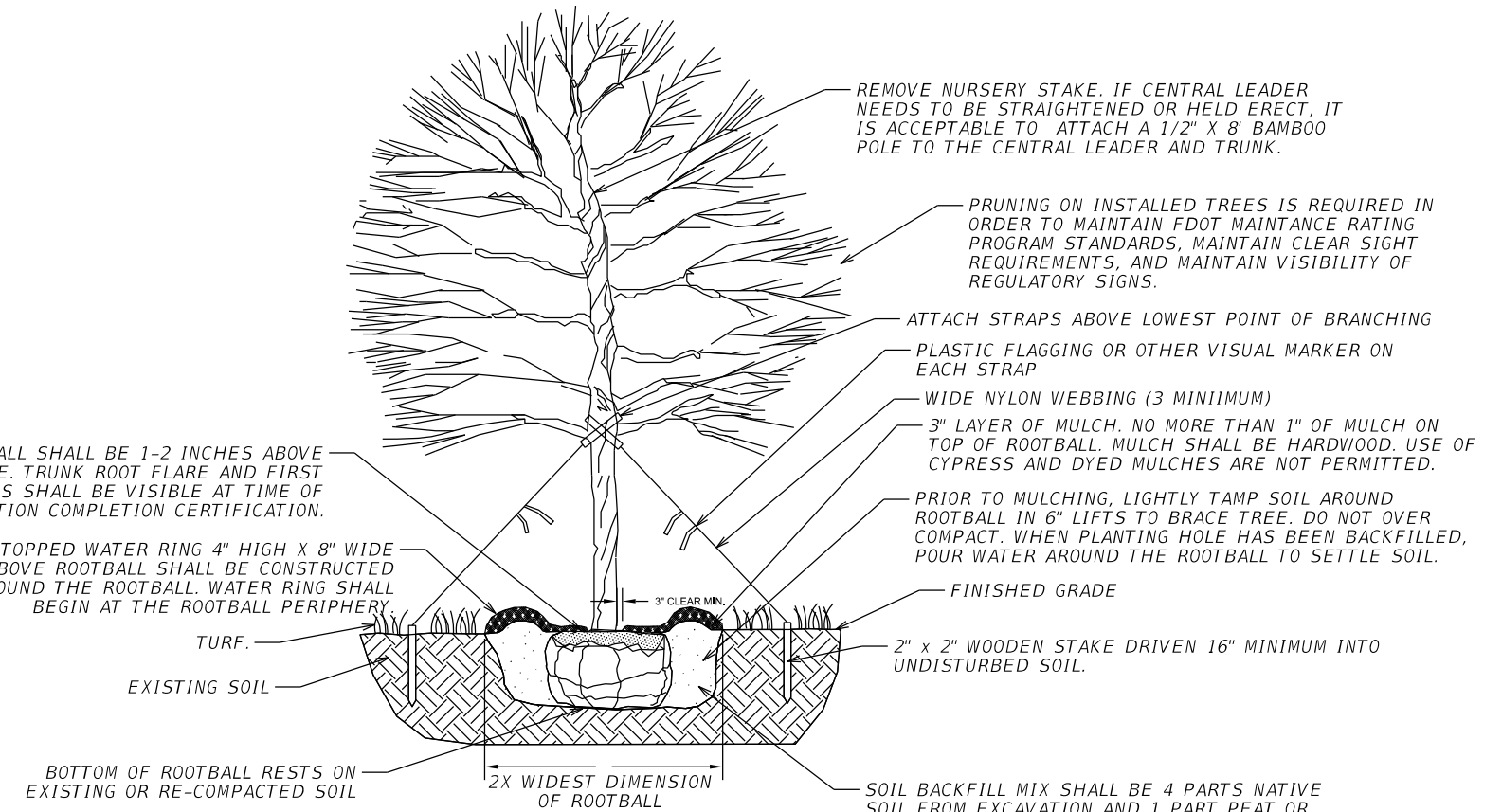
- DURING THE WARRANTEE PERIOD, THE CONTRACTOR SHALL REPLACE AT HIS OWN EXPENSE ANY PLANT THAT DIES OR FALLS BELOW CONTRACT SPECIFICATION REQUIREMENTS AND IN THE OPINION OF THE OWNER WILL NOT FULLY RECOVER BEFORE THE END OF THE WARRANTEE PERIOD. THE CONTRACTOR MUST REPLACE DEFECTIVE MATERIAL WITHIN 30 DAYS OF NOTIFICATION.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL LANDSCAPING WITHIN THE TIME LIMITS OF THE WARRANTEE PERIOD. MAINTENANCE SHALL INCLUDE BUT IS NOT LIMITED TO MOWING, EDGING, WEEDING, WATERING, PRUNING, FERTILIZING, MULCHING, TREATMENT OF PLANT DISEASE OR PESTS, AND MAINTENANCE OF ALL TREE BRACING. IT SAHLL ALSO INCLUDE THE REMOVAL OF ALL TREE BRACING AT THE END OF THE WARRANTEE PERIOD.

REVISIONS				 3250 W. COMMERCIAL BLVD, SUITE 350 FT. LAUDERDALE, FLORIDA 33309 FBPE CERTIFICATE OF AUTHORIZATION NO. 24 HARRY L. BELTON, RLA #900	SANDY LANE MULTI-USE PATH ACROSS THE ESTERO RIVER & ALONG BROADWAY			PLANT SCHEDULE AND LANDSCAPE NOTES	SHEET NO.  LD-12
DATE	DESCRIPTION	DATE	DESCRIPTION		CLIENT	PROJECT #			
				VILLAGE OF ESTERO	CN 2022-02				



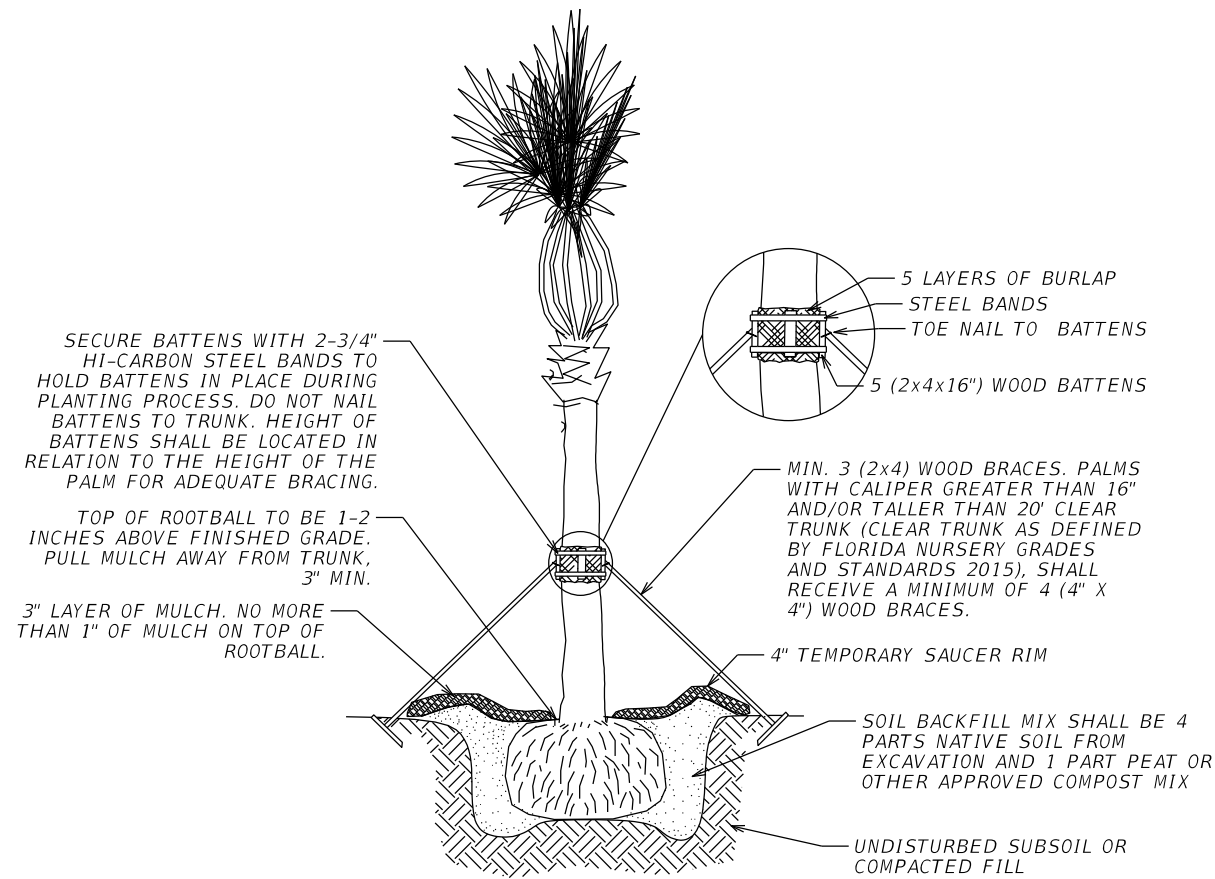
**7 GALLON AND ABOVE SHRUB PLANTING**

N.T.S.



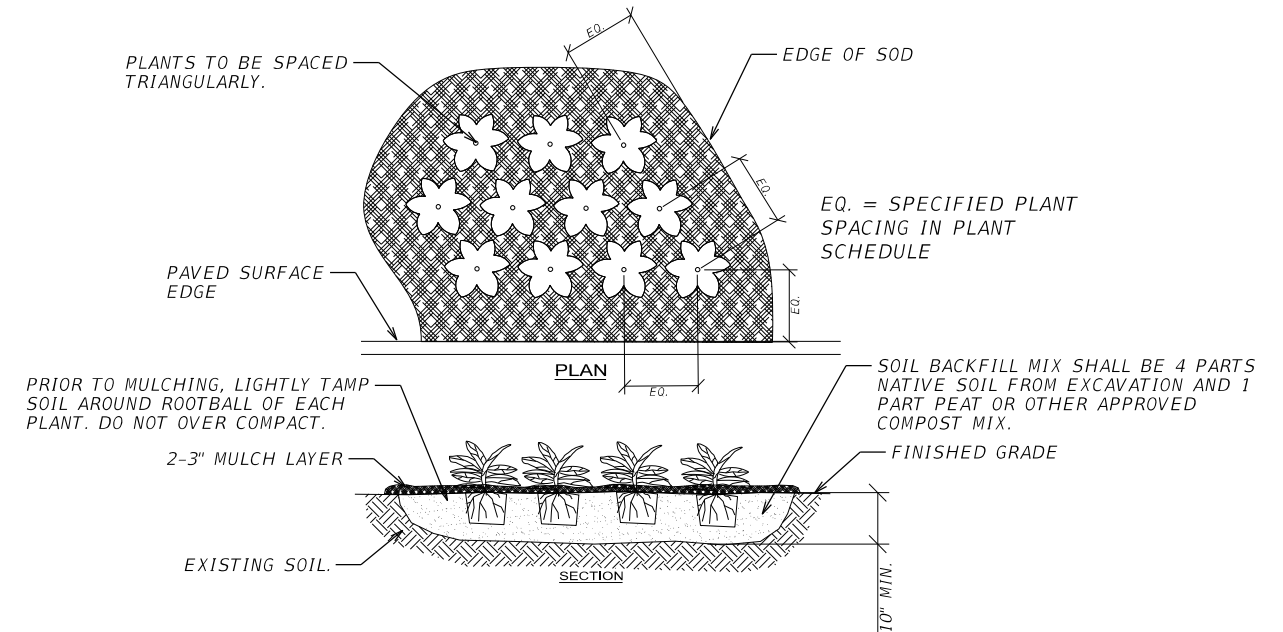
**TYPICAL TREE PLANTING**

N.T.S.



**TYPICAL PALM PLANTING**

N.T.S.



**3 GALLON AND BELOW PLANTING DETAIL**

N.T.S.

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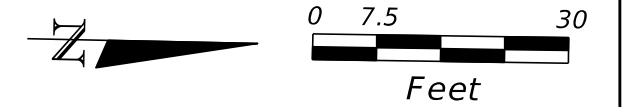
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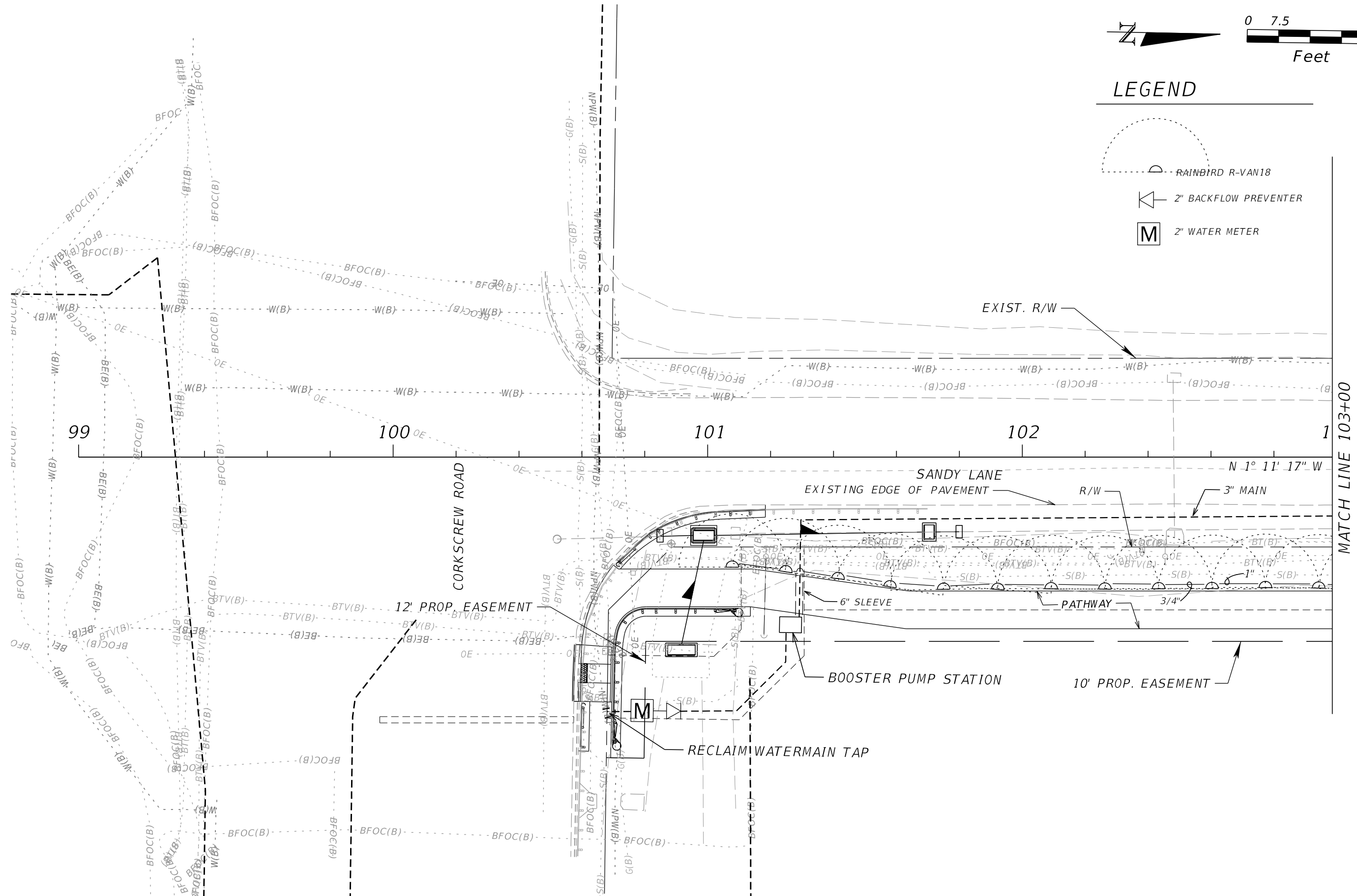
**PLANTING  
 DETAILS**

SHEET NO.  
 LD-13



**LEGEND**

- RAINBIRD R-VAN18
- 2" BACKFLOW PREVENTER
- 2" WATER METER



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

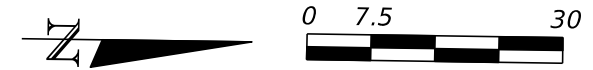
**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02

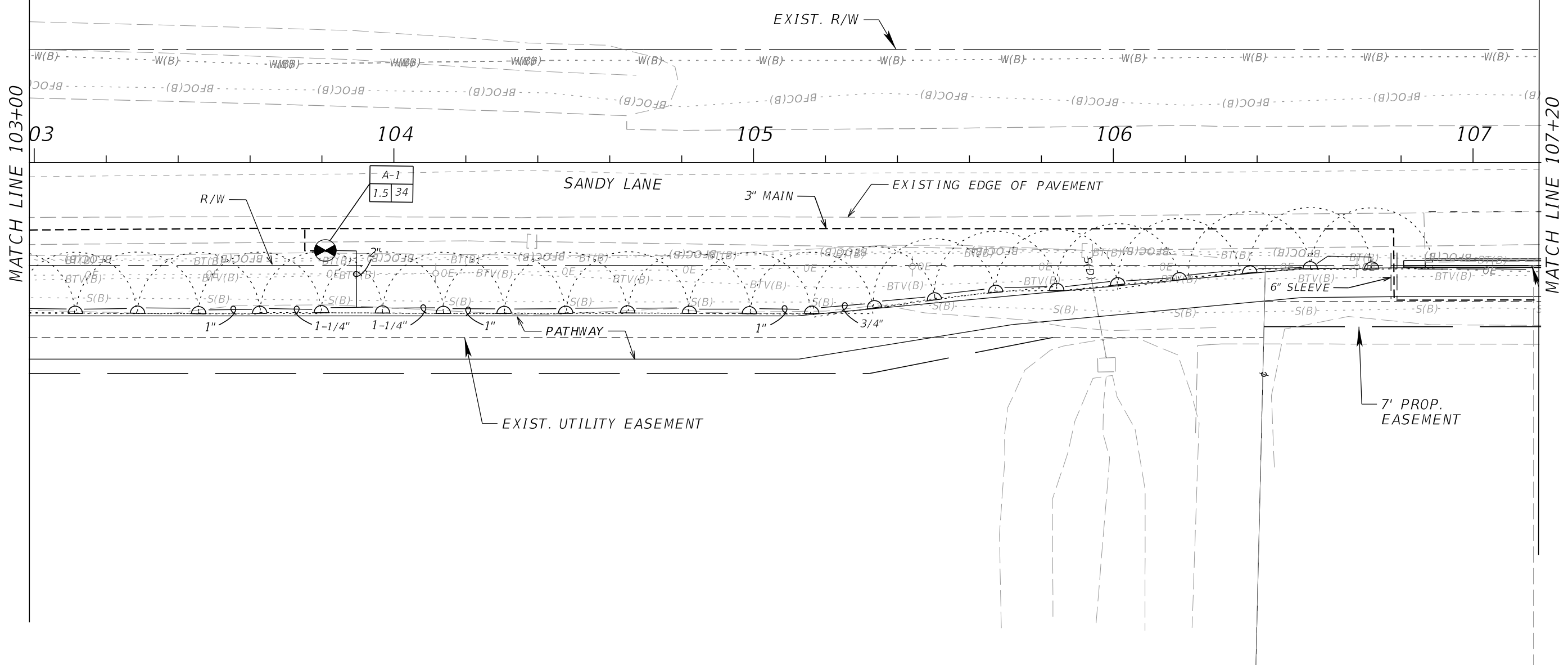
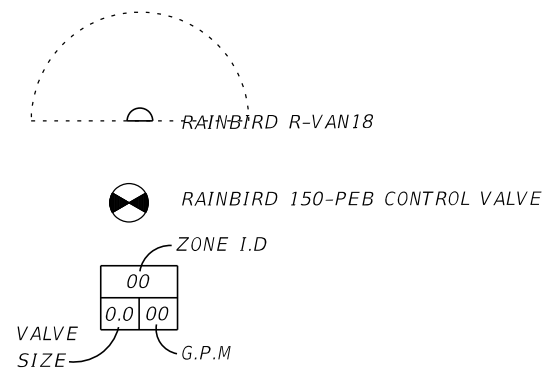


**IRRIGATION PLAN**

SHEET NO.  
LD-14



**LEGEND**



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

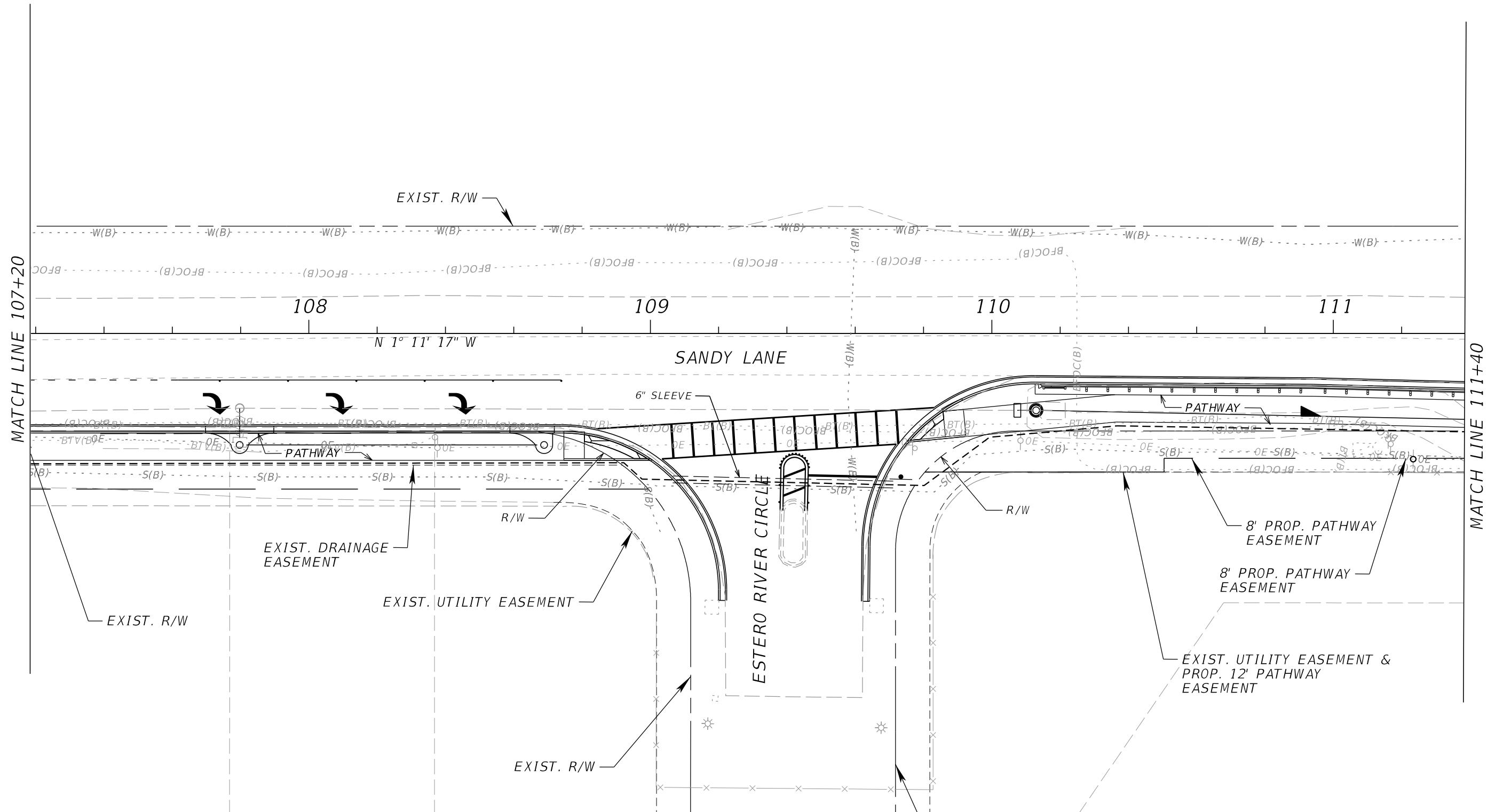
**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



**IRRIGATION PLAN**

SHEET NO.  
LD-15



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

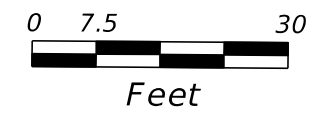
CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



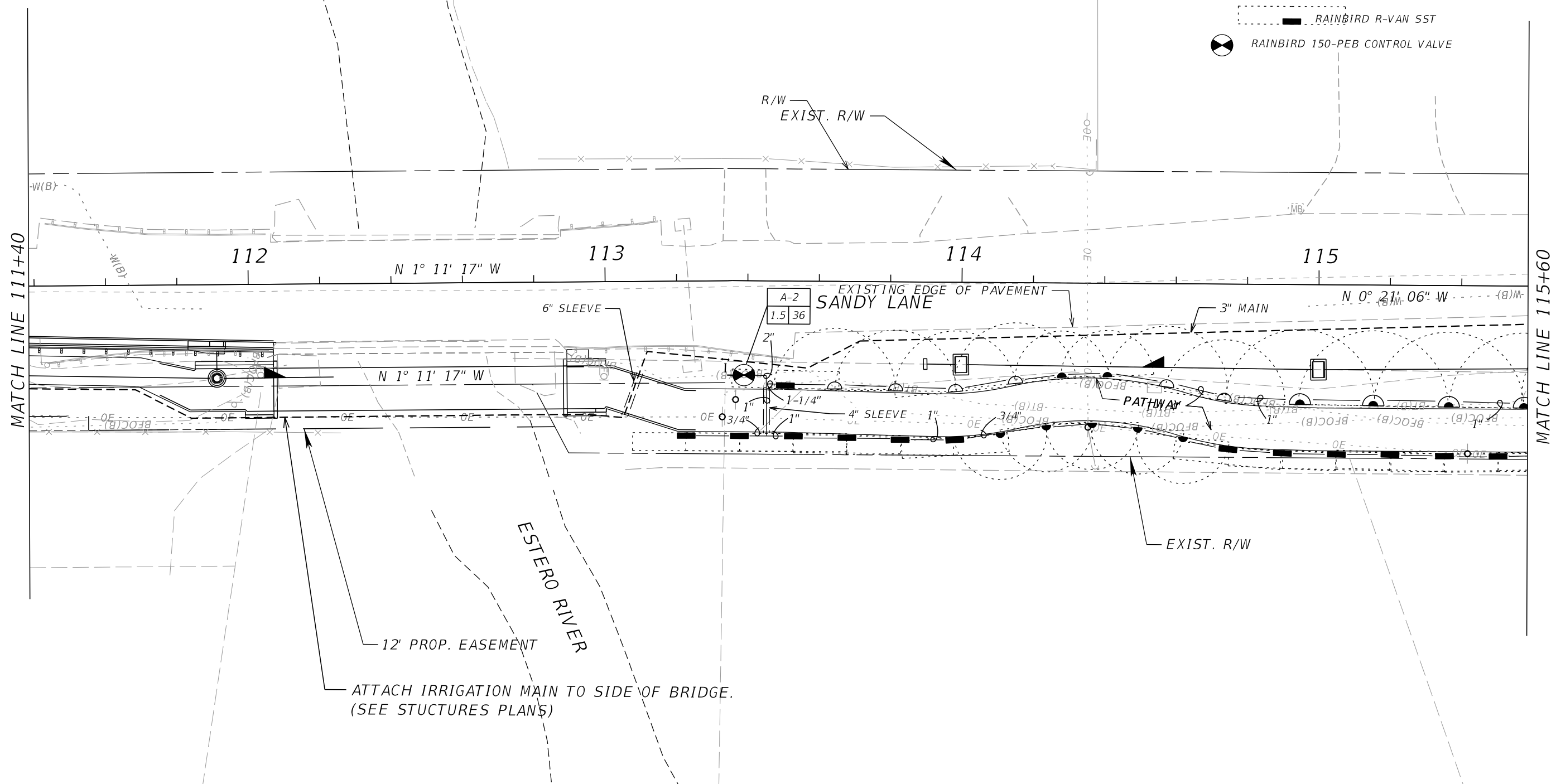
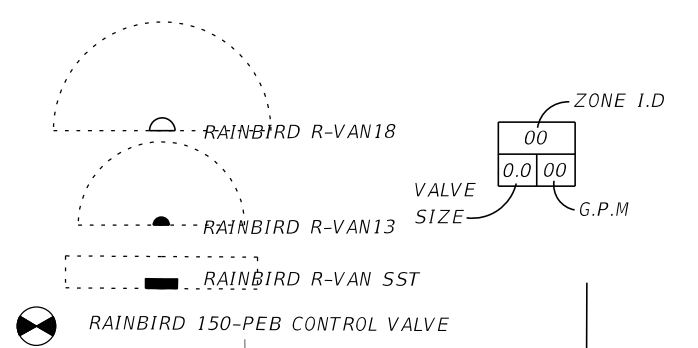
**IRRIGATION PLAN**

SHEET NO.  
LD-16





### LEGEND



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY

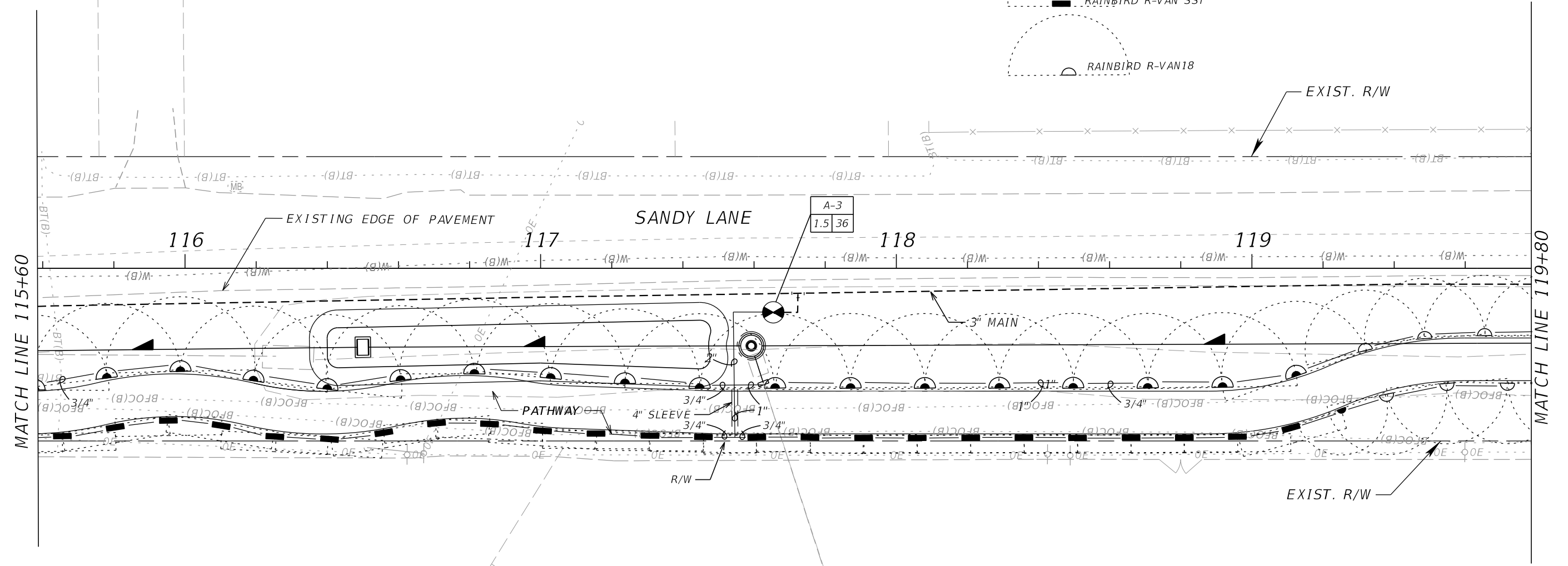
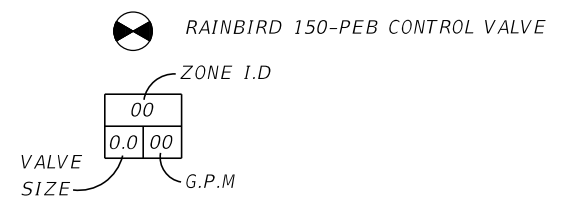
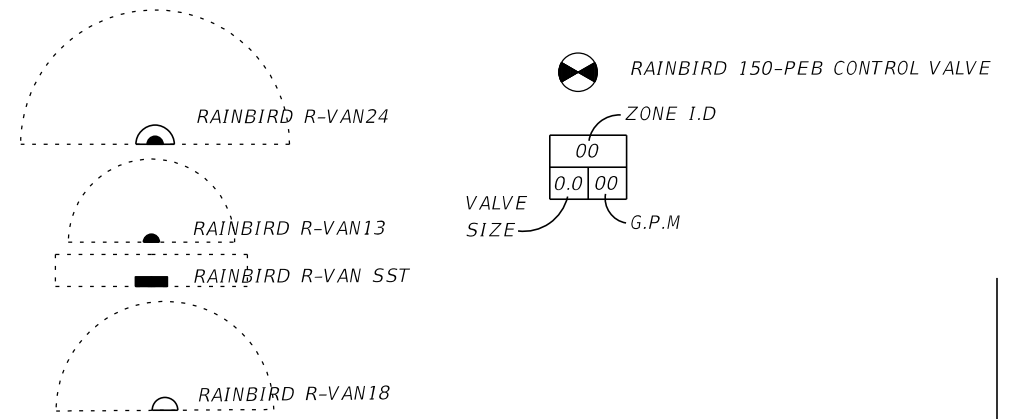
CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



## IRRIGATION PLAN

SHEET NO.  
LD-17

### LEGEND



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

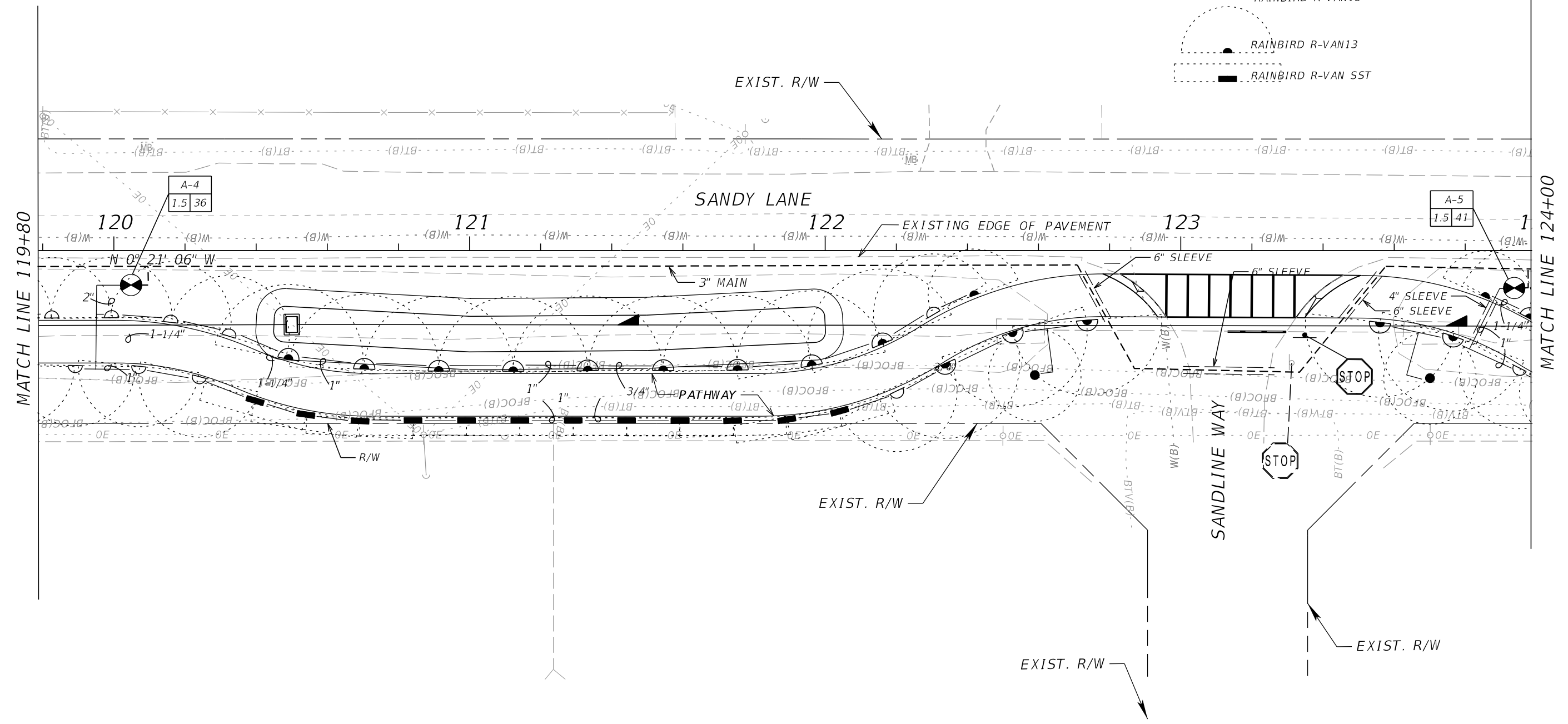
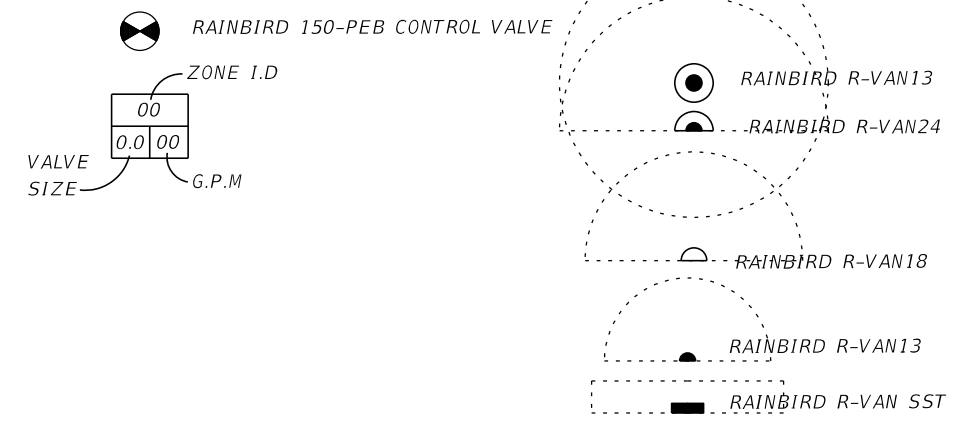
CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



## IRRIGATION PLAN

SHEET NO.  
**LD-18**

## LEGEND



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

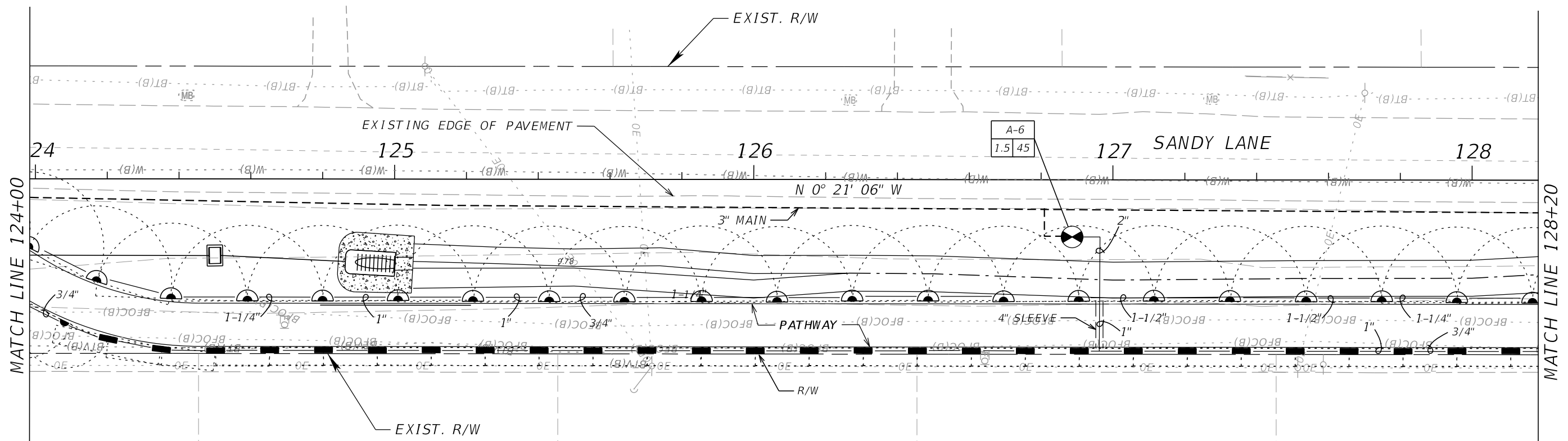
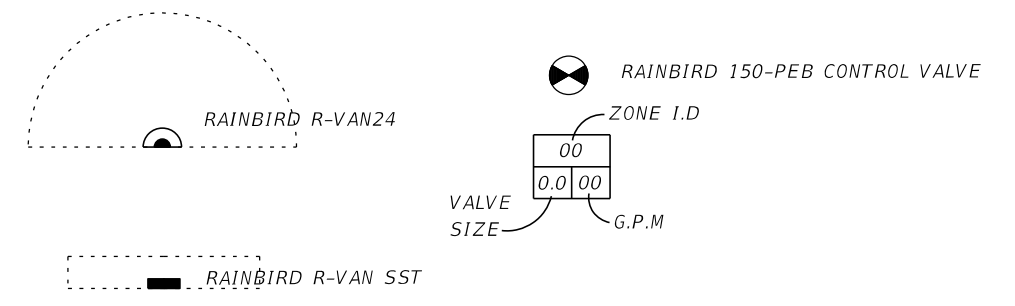
CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



# IRRIGATION PLAN

SHEET NO.  
**LD-19**

### LEGEND



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

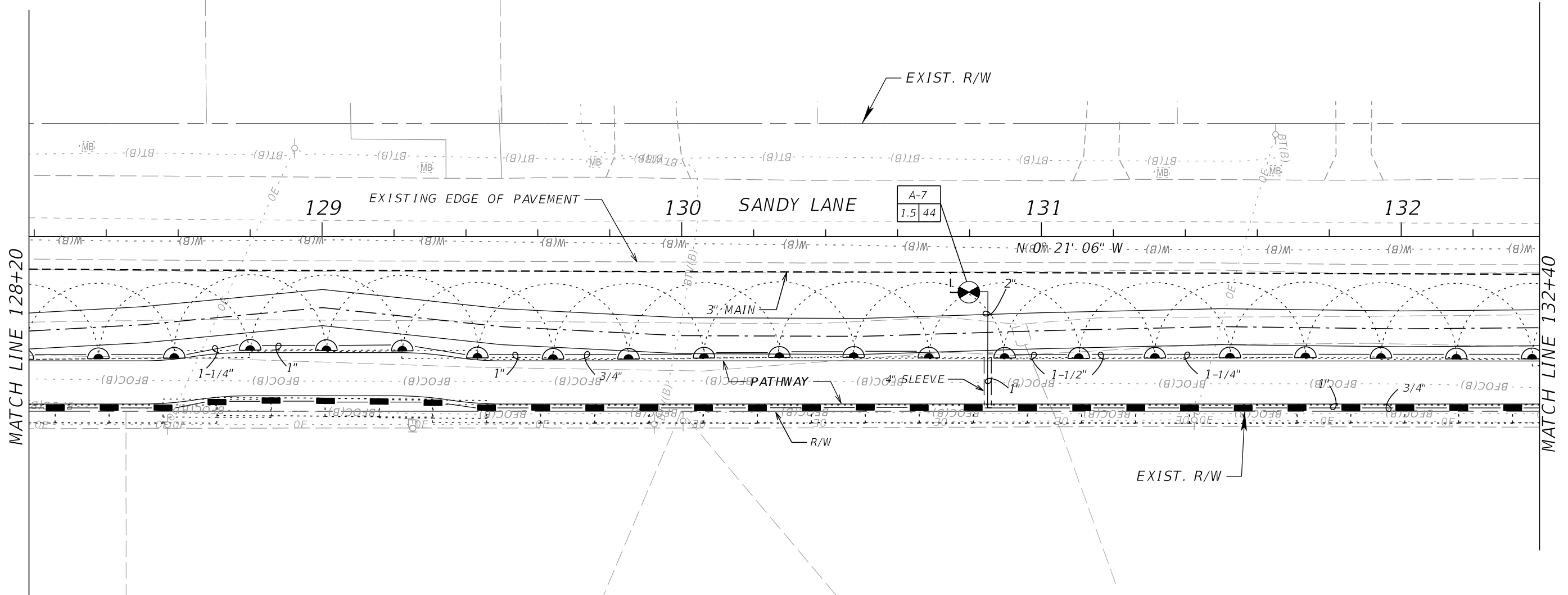
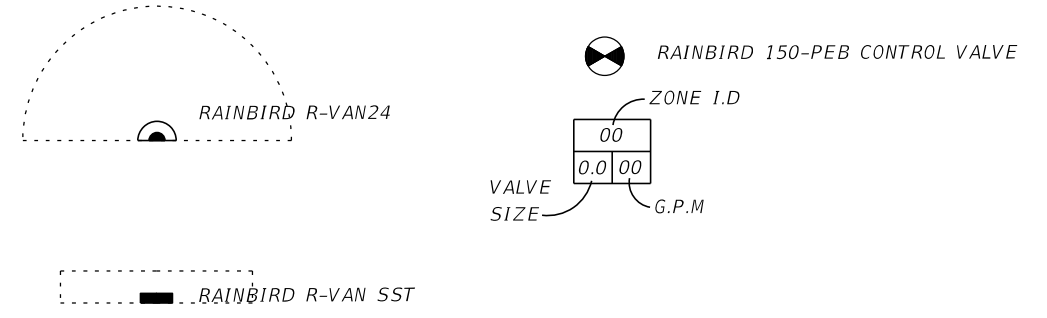
SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY  
 CLIENT: VILLAGE OF ESTERO  
 PROJECT #: CN 2022-02



## IRRIGATION PLAN

SHEET NO.  
 LD-20

### LEGEND



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

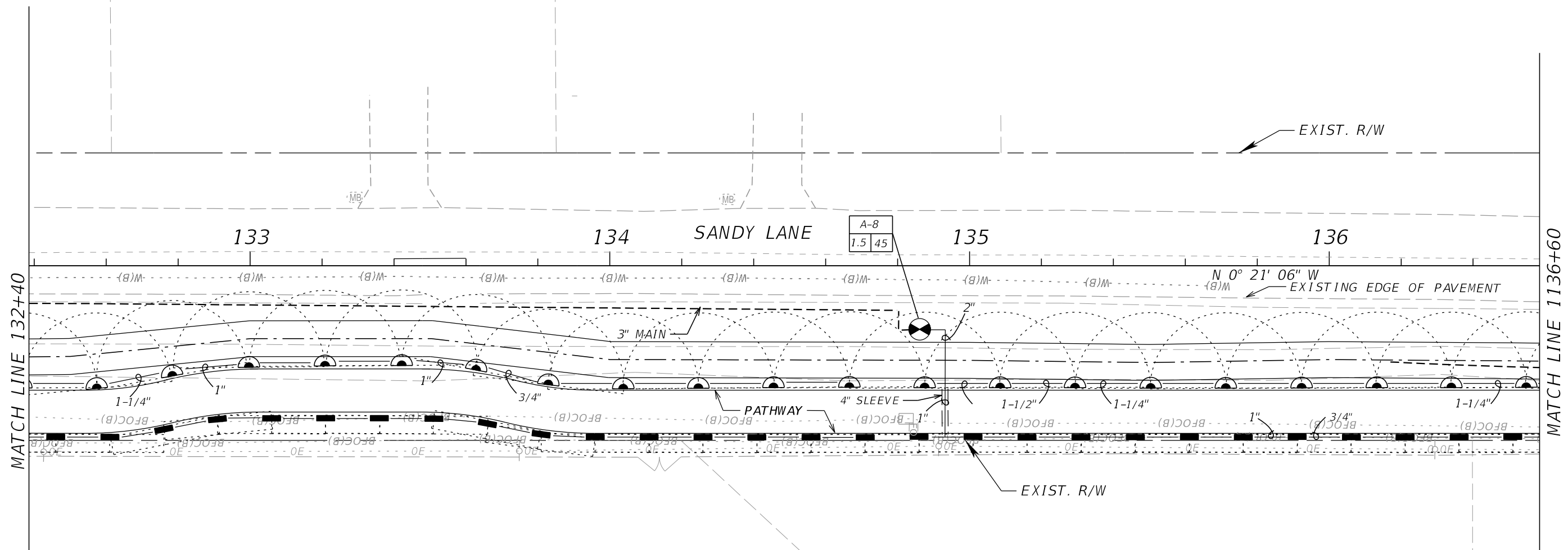
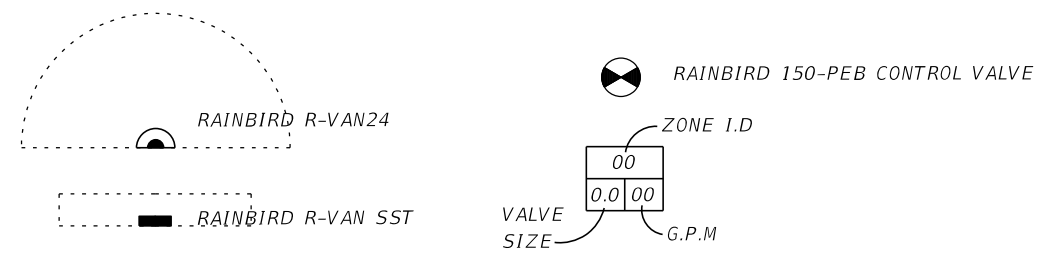
SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY  
 CLIENT: VILLAGE OF ESTERO  
 PROJECT #: CN 2022-02



## IRRIGATION PLAN

SHEET NO.  
 LD-21

### LEGEND



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ATKINS**  
 3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
 FBPE CERTIFICATE OF AUTHORIZATION NO. 24  
 HARRY L. BELTON, RLA #900

SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY

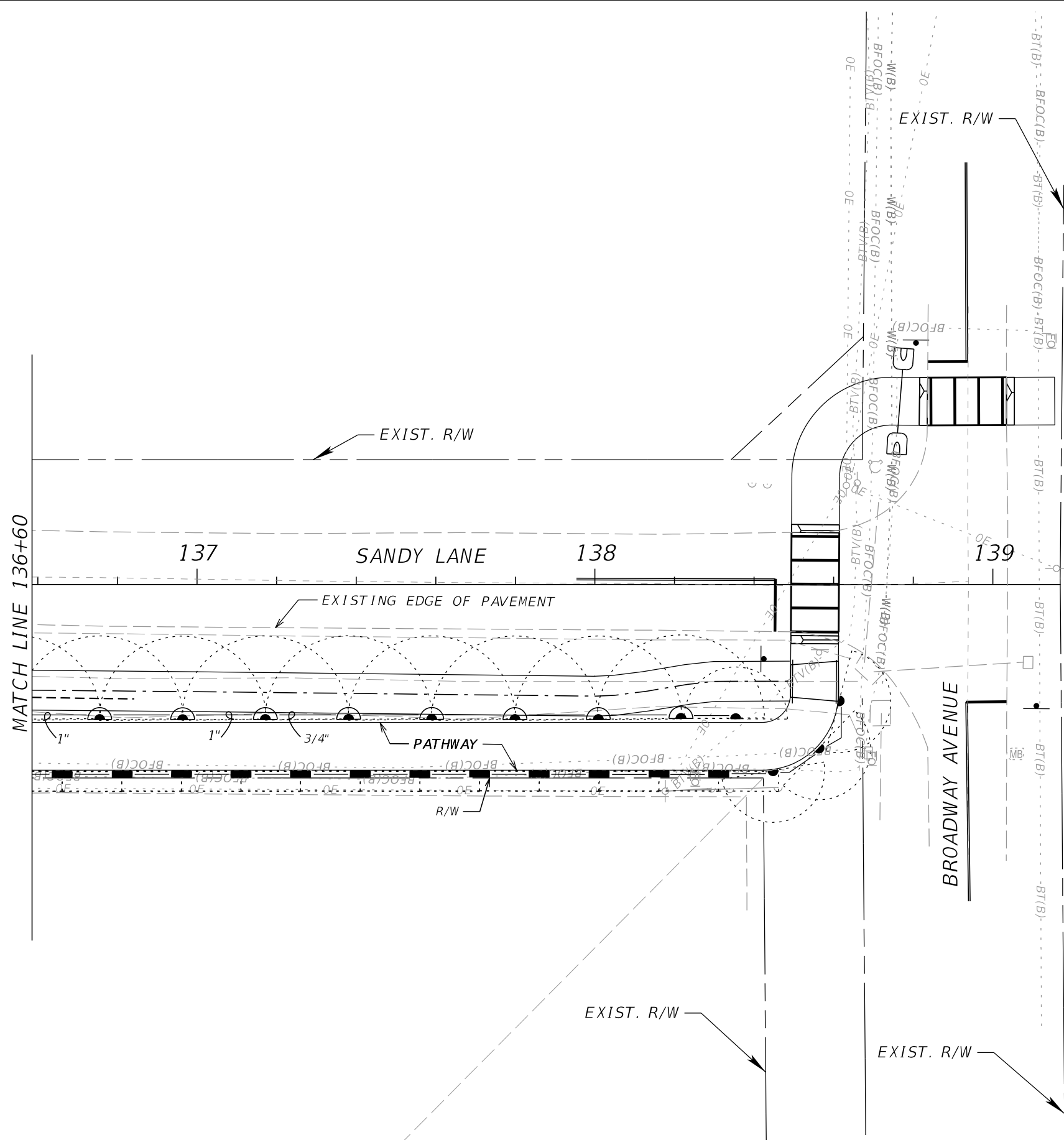
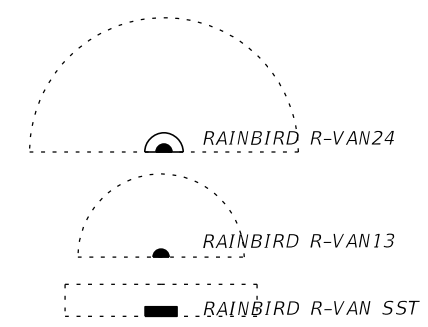
CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



## IRRIGATION PLAN

SHEET NO.  
 LD-22

**LEGEND**



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ATKINS

3250 W. COMMERCIAL BLVD, SUITE 350  
 FT. LAUDERDALE, FLORIDA 33309  
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 HARRY L. BELTON, RLA #900

**SANDY LANE MULTI-USE PATH  
 ACROSS THE ESTERO RIVER & ALONG BROADWAY**

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



IRRIGATION PLAN

SHEET NO.  
 LD-23

**IRRIGATION TABULATION OF QUANTITIES**

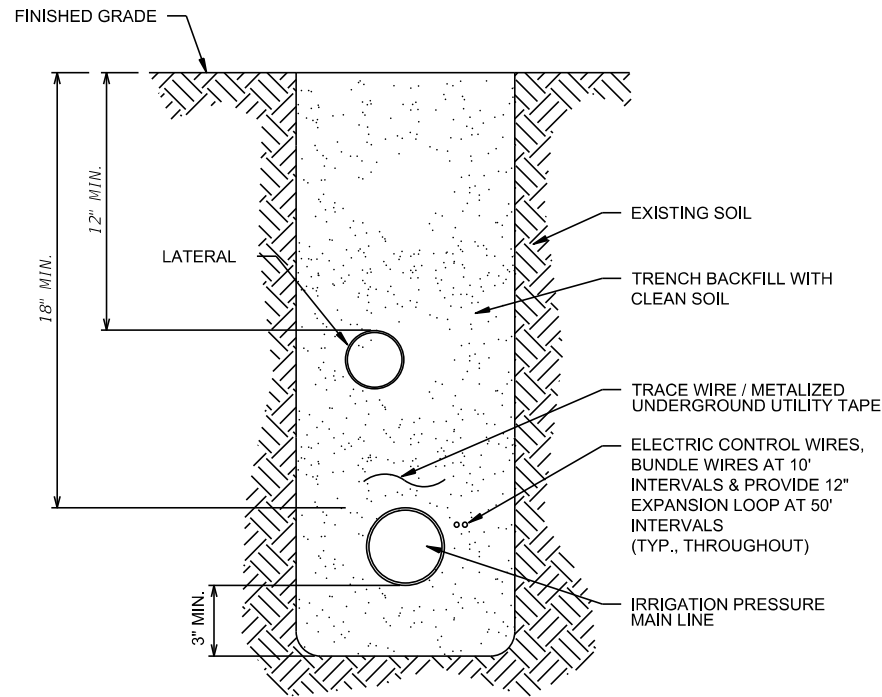
PAY ITEM NO.	COMPONENT	FLOW (GPM)	RADIUS THROW	SPACING	REMARKS	UNIT	TOTAL	
							PLAN	FINAL
590-70	IRRIGATION SYSTEM - COMPLETE					LS	1	
	SPRAY HEADS							
	RAINBIRD 1804 SPRAY BODY	0.5	5' X 30'	PER PLAN	R-VAN SST	EA	132	
		0.2-0.35	13'	PER PLAN	R-VAN13	EA	38	
		0.5	17'	PER PLAN	R-VAN18	EA	62	
		0.4-0.65	21'	PER PLAN	R-VAN24	EA	101	
	ZONE CONTROL VALVE				RAINBIRD 150-PEB (INCLUDES VALVE BOX)	EA	8	
	LATERAL LINE							
	3/4" CLASS 200 PVC					LF	2960	
	1" CLASS 200 PVC					LF	1465	
	1-1/4" CLASS 200 PVC					LF	815	
	1-1/2" CLASS 200 PVC					LF	250	
	2" CLASS 200 PVC					LF	200	
	SLEEVING							
	4" SCHEDULE 40 PVC					LF	105	
	6" SCHEDULE 40 PVC					LF	185	
	MAIN LINE							
	3" SCHEDULE 40 PVC					LF	3580	
	PUMP							
	IRRIGATION PUMP STATION PACKAGE				INCLUDES CONTROLLER	EA	1	
IRRIGATION QUANTITIES ARE APPROXIMATE AND SUMMARIZED FOR COST ESTIMATING PURPOSES, ARE NOT INCLUSIVE OF ALL REQUIRED MISC. MATERIALS, AND ARE BASED ON THE PROVIDED DESIGN. ANY MODIFICATIONS AND/OR FIELD CHANGES DEEMED NECESSARY WILL INHERENTLY ALTER THE QUANTITIES PROVIDED HERE-IN.								

**IRRIGATION NOTES:**

1. THE IRRIGATION CONTRACTOR SHALL BE CERTIFIED BY THE IRRIGATION ASSOCIATION AND SHALL BE ON SITE TO DIRECT ALL IRRIGATION CONSTRUCTION ACTIVITIES.
2. ALL MATERIALS FOR THIS PROJECT SHALL BE NEW. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR APPROVAL BY THE PROJECT ENGINEER.
3. PLANS ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. ALL EQUIPMENT SHALL BE INSTALLED IN PVIOUS AREA (EXCEPT FOR SLEEVING) AND WITHIN THE RIGHT OF WAY.
4. ALL IRRIGATION COMPONENTS AND THEIR INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL CODES, CONTRACT DRAWINGS, MANUFACTURER'S RECOMMENDATIONS AND CONTRACT SPECIFICATIONS.
5. THE QUANTITIES ARE SUMMARIZED FOR THE CONVENIENCE OF THE CONTRACTOR AND OF THE ENGINEER. THE IRRIGATION SYSTEM IS A LUMP SUM BID ITEM ALL INCLUSIVE OF LABOR AND MATERIALS REQUIRED FOR A COMPLETED AND TOTALLY FUNCTIONAL, 100% COVERAGE IRRIGATION SYSTEM, INCLUDING WATER AND ELECTRICAL SERVICE CONNECTIONS.
6. THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.
7. NO EXCAVATION SHALL TAKE PLACE UNTIL ALL EXISTING UTILITIES HAVE BEEN LOCATED ON SITE. CONTACT SUNSHINE STATE ONE CALL, TELEPHONE NUMBER 811, AND THE PUBLIC WORKS DEPARTMENT TWO BUSINESS DAYS PRIOR TO EXCAVATION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS FOR THE PUMP REQUIRED FOR THE PROPOSED IRRIGATION SYSTEM. THE FINALIZED PUMP LOCATION SHALL BE IN CLOSE PROXIMITY TO THE LOCATION PROVIDED IN THE IRRIGATION PLANS AND SHALL BE APPROVED BY THE MAINTAINING AGENCY PRIOR TO CONSTRUCTION.
9. ZONE LINES ARE DESIGNED TO PERFORM AT 30 PSI AT THE LAST HEAD. APPROPRIATE PRESSURE REGULATING ITEMS SHALL BE INSTALLED AS NOTED IN THE PLANS.
10. ZONE LINE PIPING SHALL BE CLASS 200 PVC PLASTIC PIPE OR APPROVED EQUAL.
11. THE IRRIGATION MAIN LINE SHALL BE SCHEDULE 40 PVC INSTALLED 18" BELOW THE FINISHED GRADE AND 36" BELOW FINISHED GRADE OF ROADWAY. FINISHED GRADE SHALL BE 2" BELOW TOP OF CURB, ADJACENT PAVEMENT, AND/OR SURROUNDING GROUND.
12. IRRIGATION LINES AND FITTINGS SHALL BE SOLVENT WELDED WITH E-2 WELD BLUE GLUE WITH WELD-ON P70 PURPLE PRIMER, OR APPROVED EQUALS.
13. ALL VALVES, FILTERS, GAUGES, ETC., SHALL BE ENCLOSED IN APPROVED VALVE SERVICING AND MAINTENANCE AFTER INSTALLATION OF THE LANDSCAPING.
14. INCLUDE INSTALLATION OF 30MIL, 12 AWG TRACER WIRE ALONG THE MAINLINE.
15. FLUSH ALL LINES FOR A MINIMUM OF TEN MINUTES.
16. AFTER THE SATISFACTORY COMPLETION OF THE MAIN, AND BEFORE BACKFILLING, THE MAIN SHALL BE FILLED WITH WATER AND TESTED FOR PRESSURE AT THE WORKING PRESSURE WITH GAUGES AT OPPOSITE ENDS OF THE SYSTEM. MONITOR FOR TWO HOURS. THERE CAN BE NO PRESSURE LOSS. ALSO EACH ZONE SHALL BE VISUALLY TESTED FOR LEAKAGE.
17. IRRIGATION SYSTEM SHALL BE OPERABLE FOR A MINIMUM OF 48 HOURS PRIOR TO THE LAYING OF SOD. GROUND SHALL BE THOROUGHLY SATURATED PRIOR TO THE LAYING OF SOD.
18. IF ANY COMPONENT OF THE IRRIGATION SYSTEM IS BROKEN DURING CONSTRUCTION, THE IRRIGATION CONTRACTOR WILL BE NOTIFIED IMMEDIATELY. THE IRRIGATION CONTRACTOR SHALL IMMEDIATELY MAKE ALL NECESSARY REPAIRS TO THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL BE AWARE OF ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA AND ENSURE THAT NO EXISTING IRRIGATION SYSTEMS WILL BE DAMAGED. ANY DAMAGE TO AN EXISTING IRRIGATION SYSTEM SHALL BE FULLY REPAIRED BY THE CONTRACTOR. THOSE RESPONSIBLE FOR THE DAMAGE.
19. AT THE PRE-CONSTRUCTION MEETING THE CONTRACTOR SHALL PROVIDE:
  - CUT SHEETS OF ALL IRRIGATION EQUIPMENT TO BE PROVIDED
  - A UNIT COST BREAKDOWN OF PROPOSED IRRIGATION MATERIALS TO BE INSTALLED
  - AN INSTALLATION SCHEDULE FOR ALL IRRIGATION EQUIPMENT AT EACH AREA OF THE SITE
20. BEFORE THE IRRIGATION IS ACCEPTED THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND ORGANIZING AN OPERATIONAL TRAINING SESSION WITH TOWN STAFF IN THE FIELD. THIS MEETING WILL INFORM THE TOWN'S MAINTENANCE STAFF OF THE SYSTEM COMPONENTS AND FUNCTIONALITY.
21. UPON PROJECT ACCEPTANCE THE CONTRACTOR SHALL PROVIDE COPIES OF THE OPERATION MANUAL, MAINTENANCE SCHEDULES, WARRANTIES, AS-BUILTS, IRRIGATION WELL PERMITS AND CONDITIONS, AND ANY OTHER PERTINENT INFORMATION ABOUT THE SYSTEM.

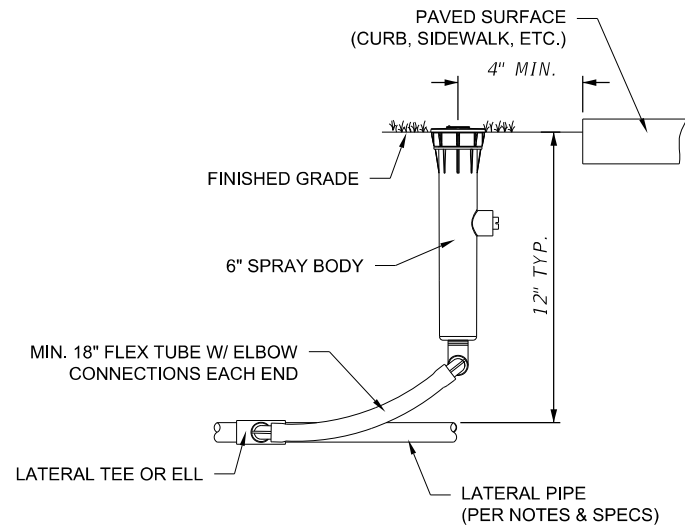
<p align="center"><b>ATKINS</b></p> <p align="center">3250 W. COMMERCIAL BLVD, SUITE 350 FT. LAUDERDALE, FLORIDA 33309 FBPE CERTIFICATE OF AUTHORIZATION NO. 24 HARRY L. BELTON, RLA #900</p>				<p align="center">SANDY LANE MULTI-USE PATH ACROSS THE ESTERO RIVER &amp; ALONG BROADWAY</p> <p align="center">CLIENT: VILLAGE OF ESTERO      PROJECT #: CN 2022-02</p>			<p><b>IRRIGATION</b></p> <p><b>SCHEDULE &amp; NOTES</b></p>	<p>SHEET NO.</p> <p>LD-24</p>											
<p align="center">REVISIONS</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				DATE	DESCRIPTION	DATE	DESCRIPTION					<p align="center">7/21/2023 6:47:14 PM Default</p>				<p align="center">c:\pw_work\atknaf101\barr7434\dms99177\detl1d01_ir.dgn</p>			
DATE	DESCRIPTION	DATE	DESCRIPTION																





**TRENCHING DETAIL**

N.T.S.



**4\"/>**

N.T.S.

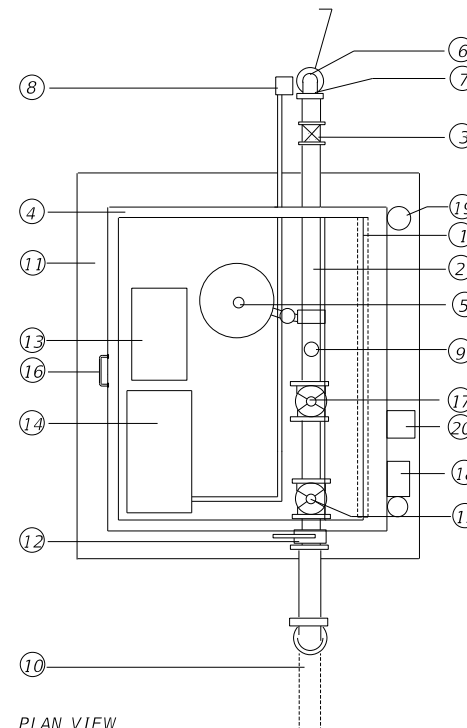
NOTE: DISCHARGE PIPES & HEADER TO IRRIGATION MAIN SHALL BE SCHED. 40 GALVANIZED STEEL PIPE WITH GALV. ROLL GROVE FITTINGS. PUMP DROP PIPE SHALL BE HDPE HEAT FUSED OR SCHED 40 GALV. STEEL. SET PUMP 170\"/>

PROVIDE MINIMUM OF 4' CLEARANCE ON ALL SIDES OF THE PUMP.

CONTROL PARAMETERS WITH EVENT LOGGING AND ALERTS FOR WARNINGS AND ALARMS AS FOLLOWS:

- HMI CONTROL INTERFACE AND DISPLAY ON CONTROL PANEL
- MAXIMUM GALLON PER MINUTE USAGE WITH ADJUSTABLE TIME DELAY AND NUMBER OF RESTART ATTEMPTS
- MINIMUM TOTAL DAILY WATER USAGE
- DAILY, MONTHLY, AND ANNUAL WATER USAGE BUDGETS
- GRAPHING OF REAL TIME AND HISTORICAL FLOW, INCOMING AND DISCHARGE PRESSURE
- RAIN GAUGE PRECIPITATION REPORTING, ADJUSTABLE SHUTDOWN
- HISTORIC WATER USAGE BY DAY AND MONTH
- VFD FAULT/STARTER OVERLOAD FAULT SHUTDOWN
- POWER OFF/ON ALERT
- PUMP RAPID CYCLE
- PUMP LOSS OF PRIME
- WATER LEVEL CONTROL, GRAPHING, ALERTS, AND ALARMS IF APPLICABLE

- SAFETY FEATURES:  
PRESSURE DEMAND:  
-TRANSIENT SURGE  
-LOSS OF PRIME  
-HIGH FLOW



PLAN VIEW  
NTS

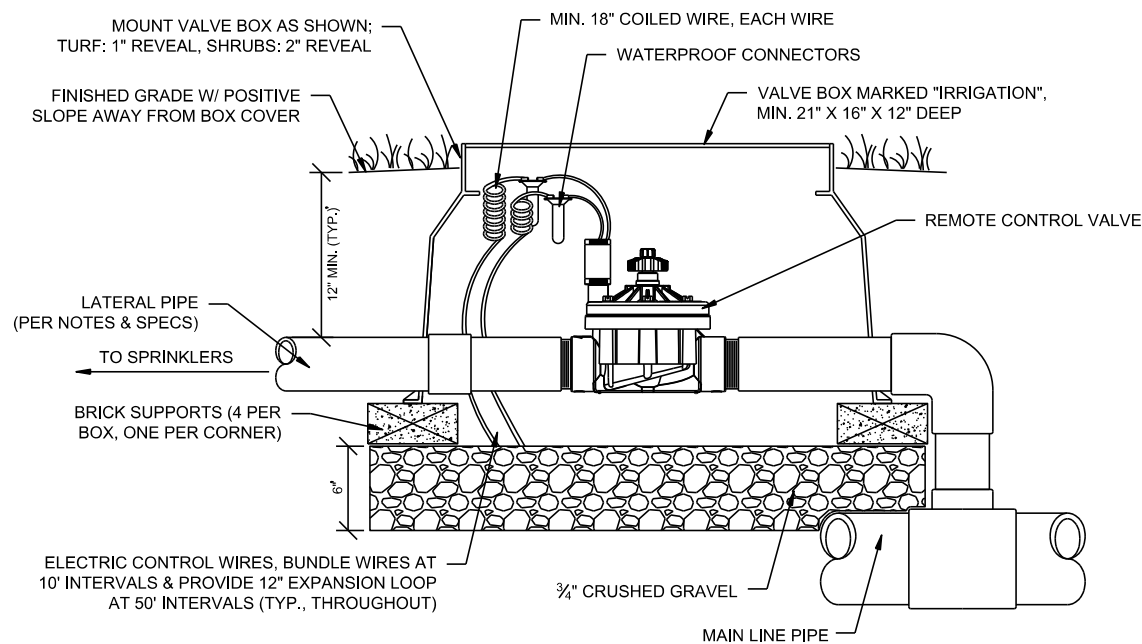
- 1 4' X 4' FIBERGLASS REINFORCED ENCLOSURE WITH FOREST GREEN GELCOAT FINISH
- 2 GALV. STEEL DISCHARGE HEADER PIPE WITH GALV. ROLL GROVE FITTINGS
- 3 CHECK VALVE
- 4 4' X 4' ALUMINUM SKID PLATE BOLTED TO CONCRETE PAD
- 5 PRESSURE TANK
- 6 CENTRIFUGAL PUMP/MOTOR 10 HP
- 7 CONNECTION TO RECLAIM WATER
- 8 J-BOX WITH UL PVC CONDUIT TO CONTROL PANEL
- 9 PRESSURE TRANSDUCERS
- 10 3\"/>

ELECTRIC SERVICE TO BE:

PUMP PERFORMANCE  
65 GPM @ 140 TDH, 60 PSI

**BOOSTER PUMP DETAIL**

N.T.S.



**REMOTE CONTROL VALVE INSTALLATION**

N.T.S.

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SANDY LANE MULTI-USE PATH  
ACROSS THE ESTERO RIVER & ALONG BROADWAY

CLIENT	PROJECT #
VILLAGE OF ESTERO	CN 2022-02



**IRRIGATION  
DETAILS**

SHEET NO.  
LD-25