



# TOWN OF CUTLER BAY

## SAGA BAY 1.2 SUB-BASIN DRAINAGE IMPROVEMENTS

### CONTRACT PLANS

#### COMMUNITY OFFICIALS

PEGGY R. BELL, MAYOR  
SUE ELLEN LOYZELLE, VICE MAYOR  
MARY ANN MIXON, TOWN COUNCIL  
MICHAEL P. CALLAHAN, TOWN COUNCIL  
ROGER CORIAT, TOWN COUNCIL

#### INDEX SHEETS

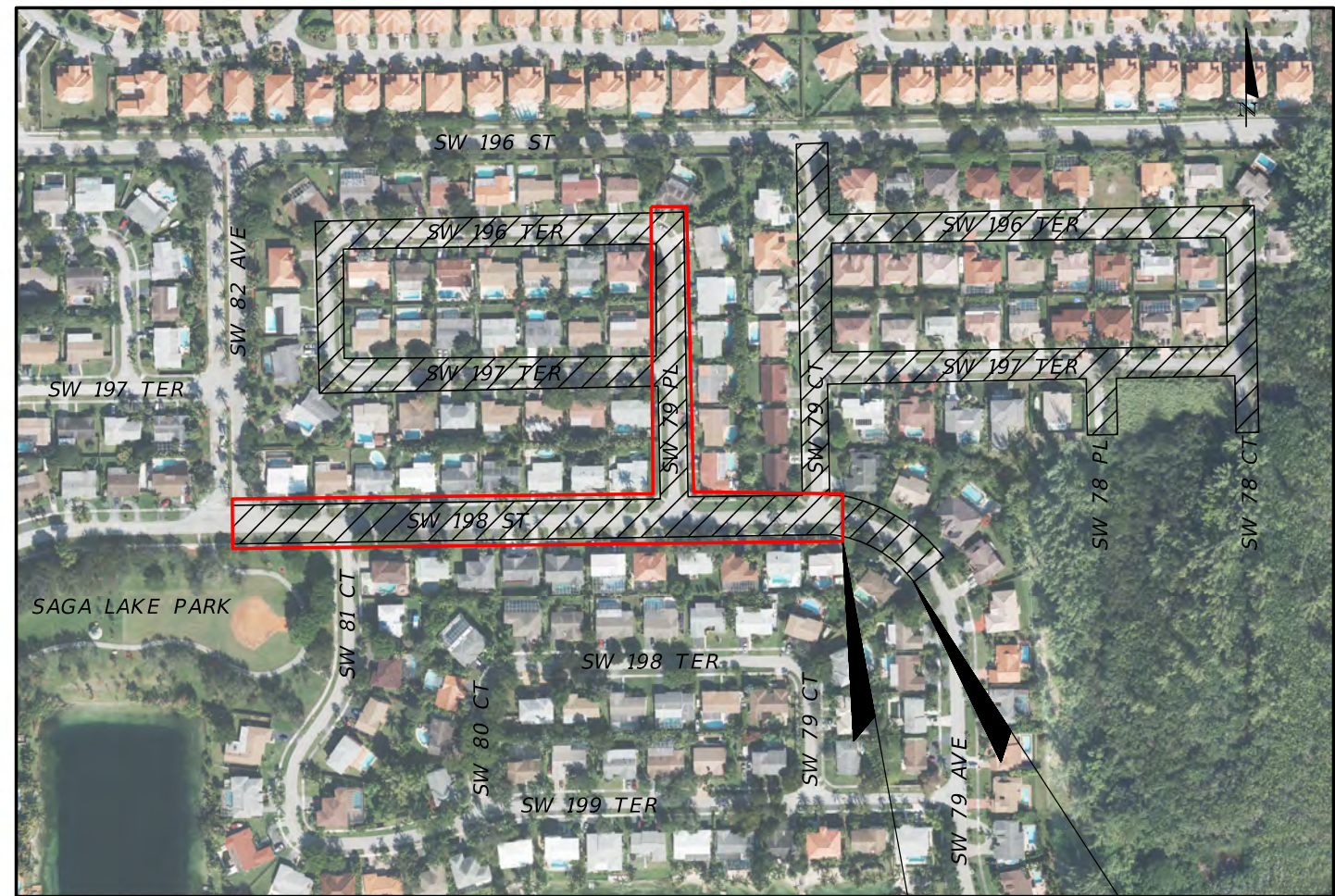
SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	GENERAL NOTES
3	TABULATION OF QUANTITIES
4-9	PLAN & PROFILES
10-12	STRUCTURE SHEETS PROFILES
13-14	DRAINAGE DETAILS
15	SWPPP NOTES AND DETAILS
16	MILLING AND RESURFACING PLAN



#### GOVERNING STANDARDS AND SPECIFICATIONS:

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE TOWN OF CUTLER BAY STANDARDS, MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT STANDARDS AND SPECIFICATIONS PART 1, 2 AND 3, THE MANUAL OF MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS DATED 2017 AND THE SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2017, AS AMENDED BY THE CONTRACT DOCUMENTS.

SW 79TH PLACE  
FROM SW 196TH TERRACE TO SW 198TH STREET  
SW 198TH STREET  
FROM SW 79TH COURT TO SW 82ND AVENUE

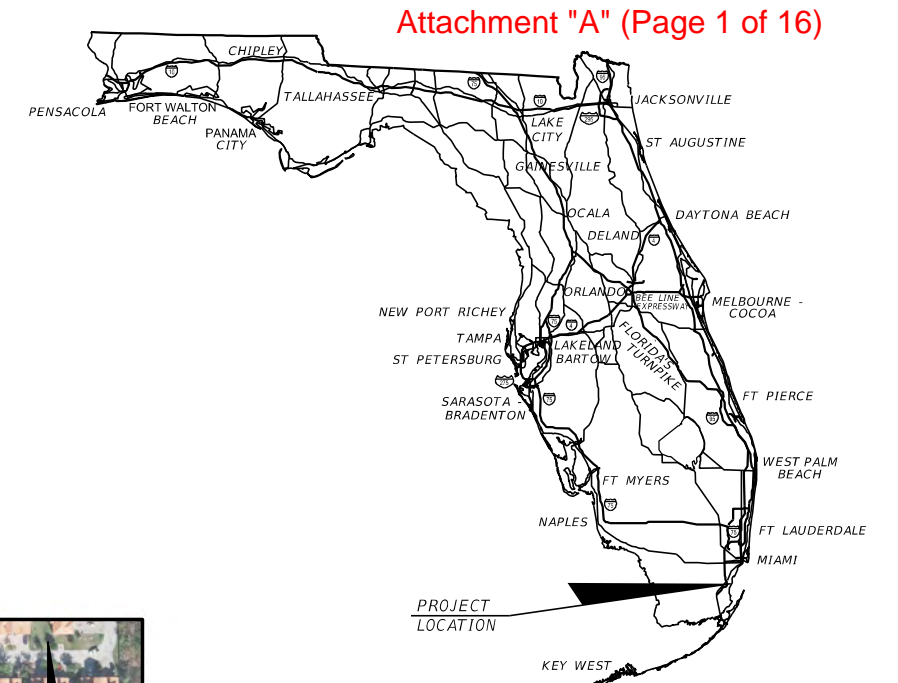


LOCATION MAP  
N.T.S.

PROJECT  
BOUNDARY

MILLING & RESURFACING  
LIMITS

ISSUED FOR BIDS  
SEPTEMBER 25, 2017



Attachment "A" (Page 1 of 16)

#### SHOP DRAWINGS TO BE SUBMITTED TO:

HANS MURZI, P.E.  
R. J. BEHAR & COMPANY, INC.  
6861 S.W. 196 AVENUE, SUITE 302  
PEMBROKE PINES, FL 33332  
PHONE: (954)-680-7771

#### PLANS PREPARED BY:



6861 S.W. 196 AVENUE, SUITE 302  
PEMBROKE PINES, FL 33332  
VENDOR IDENTIFICATION F65 095 4070  
CERTIFICATE OF AUTHORIZATION NO. 00008365  
PHONE: (954)-680-7771

NOTE: THE SCALE OF THESE PLANS MAY  
HAVE CHANGED DUE TO REPRODUCTION.

HANS MURZI, P.E. DATE  
LICENSE NO.: 67767

SHEET  
NO.

1



GENERAL NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST STANDARDS, CODES AND SPECIFICATIONS OF THE MIAMI-DADE COUNTY PUBLIC WORKS, FLORIDA DEPARTMENT OF TRANSPORTATION, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND ALL OTHER LOCAL, STATE AND MUNICIPAL CODES.
2. BENCHMARK ELEVATIONS SHOWN ON THE PLANS ARE: NAVD88
3. CONTRACTOR SHALL PRESERVE ALL STREET SIGNS, BENCHES, TRAFFIC CONTROL SIGNS, LANDSCAPING, ETC. WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REINSTALL OR DELIVER SAID PUBLIC PROPERTY TO THE TOWN OF CUTLER BAY.
4. 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 AREA, OR FOR ANY OPERATION DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
5. APPARENT ERRORS, DISCREPANCIES, OR OMISSIONS ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
6. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, SIDEWALKS, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER.
7. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT WITHOUT OBTAINING WRITTEN PERMISSION FROM THE OWNER.
8. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
9. ANY EXISTING FENCES ARE TO REMAIN UNLESS OTHERWISE NOTED. ANY FENCES, DAMAGED BY THE CONTRACTOR AT ANY TIME DURING CONSTRUCTION MUST BE REPLACED OR REPAIRED TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE TOWN OF CUTLER BAY.
10. CLEARING AND GRUBBING, GRADING AND OTHER INCIDENTAL WORK NECESSARY FOR HARMONIZATION OUTSIDE R/W SHALL BE INCLUDED IN RELATED BID ITEMS.
11. ALL GRASS AREAS AFFECTED BY CONSTRUCTION SHALL BE RE-SODDED. COST TO BE INCLUDED IN RELATED BID ITEM.
12. EXPLORATORY OR PRE-TRENCHING IN THE ALIGNMENT AND GRADE OF PROPOSED PIPES STRUCTURES, FRENCH DRAINS, CONDUITS, POLE FOUNDATIONS AND/OR SUB-GRADE SHALL BE PERFORMED SEVEN DAYS IN ADVANCE OF ITS CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE UNDERGROUND UTILITY OWNERS AND THE DEPARTMENT WITH IMMEDIATE NOTIFICATION OF ANY CONFLICT WITH PROPOSED CONSTRUCTION. THIS NOTIFICATION SHALL PROVIDE SURVEY INFORMATION ABOUT EXISTING UTILITY ALIGNMENT, GRADE AND POSSIBLE CONFLICTS. PAYMENT FOR EXPLORATORY OR PRE-TRENCHING, SURVEY AND BACKFILLING SHALL BE INCLUDED IN THE COST OF THE RELATED BID ITEM FOR THE WORK BEING DONE.
13. ALL DITCH EXCAVATIONS SHALL BE PERFORMED IN FULL COMPLIANCE WITH THE PROVISIONS OF THE TRENCH SAFETY ACT.
14. ALL EXCESS MATERIAL, AS DESIGNATED BY THE ENGINEER, IS TO BE DISPOSED BY THE CONTRACTOR IN LEGAL AREAS WITHIN 72 HOURS OF BEING DEPOSITED IN THE CONSTRUCTION AREA AND AT THE CONTRACTOR'S EXPENSE.
15. ALL DISPOSAL OF MATERIALS, RUBBISH, AND DEBRIS SHALL BE MADE AT A LEGAL DISPOSAL SITE OR BY OTHER PRIOR APPROVED MANNER. MATERIAL CLEARED FROM THE SITE AND DEPOSITED ON ADJACENT OR NEARBY PROPERTY WILL NOT BE CONSIDERED AS HAVING BEEN DISPOSED OF SATISFACTORILY.
16. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO ENGINEER OF RECORD, SHOP DRAWINGS FOR ALL ITEMS USED IN THIS PROJECT.
17. INVERT ELEVATIONS ARE BASED ON EXISTING PLANS. CONTRACTOR IS TO FIELD VERIFY EXISTING PIPE INVERT ELEVATIONS PRIOR TO SUBMITTING FOR APPROVAL. NO CONNECTION TO EXISTING PIPES IS PERMITTED UNLESS APPROVED BY THE ENGINEER.
18. WHEN DISSIMILAR MATERIAL CONNECTIONS ARE MADE, SUCH AS CONCRETE TO METAL, THE DISSIMILAR MATERIAL SHALL BE SEPARATED BY COATING THE CONTACT SURFACE WITH BITUMASTIC MATERIAL. REFER TO FDOT INDEX 280.
19. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING EXISTING AND NEW INLETS CLEAN OF CONSTRUCTION MATERIAL, LIMEROCK, DEBRIS, ETC. DURING THE CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER. ALL LINES AND STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL BE CLEANED PRIOR TO FINAL INSPECTION AND ACCEPTANCE.
20. THE EXISTING INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.
21. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL LOCATE AND EXPOSE ALL EXISTING UTILITIES THAT ARE TO BE CROSSED OR THAT ARE IN CLOSE PROXIMITY OF THE PROPOSED WORK. NOTIFY THE ENGINEER FOR RESOLUTION OF CONFLICTS.
22. CONTRACTOR TO FIELD VERIFY ANY EXISTING UTILITY LINE IN THE PROXIMITY OF THE PROPOSED WORK AND PERFORM ANY CONSTRUCTION WITH EXTREME CARE IN SUCH AREAS. TWO FULL BUSINESS DAYS PRIOR TO DIGGING, THE CONTRACTOR SHALL CALL SUNSHINE 811 AND THE UTILITY OWNER AND REQUEST UTILITY LOCATIONS. A CONTRACTOR'S REPRESENTATIVE MUST BE PRESENT WHEN UTILITY COMPANIES LOCATE THEIR FACILITIES.
23. ALL TREES ARE TO REMAIN UNLESS OTHERWISE NOTED. CONTRACTOR IS TO USE CAUTION NOT TO DAMAGE ANY TREES OR PALMS

WITHIN CONSTRUCTION LIMITS. ANY TREES DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE CITY.

## Attachment "A" (Page 2 of 16)

24. ALL PULL BOXES, MANHOLES, VALVE BOXES, ETC., SHALL BE ADJUSTED MEETING THE UTILITY OWNER'S REQUIREMENTS/CRITERIA. CONTRACTOR SHALL COORDINATE ALL THIS WORK WITH PRIOR NOTICES TO THE UTILITY OWNER.
25. IN AREAS WHERE NEW ASPHALT PAVEMENT IS MATCHING EXISTING PAVEMENT, CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT AND PROVIDE A SMOOTH TRANSITION (INCLUDING ALL DRIVEWAYS).
26. CONTRACTOR SHALL VERIFY ALL PAVEMENT WIDTHS BEFORE COMMENCING WORK.

*UTILITIES:*

1. EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
2. FOR ROADWAYS WITH EXISTING LIGHT POLES, NOTIFY THE ENGINEER AND CALL THE TOWN MAINTENANCE DEPARTMENT TO REQUEST LIGHTING CONDUIT LOCATIONS TWO (2) FULL BUSINESS DAYS PRIOR TO DIGGING.
3. PRE-TRENCHING IN THE ALIGNMENT AND GRADE OF PROPOSED PIPES STRUCTURES, FRENCH DRAINS, SLAB COVERED TRENCHES, CONDUITS, POLE FOUNDATIONS AND/OR SUB-GRADE SHALL BE PERFORMED SEVEN DAYS IN ADVANCE OF ITS CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE UNDERGROUND UTILITY OWNERS AND THE DEPARTMENT WITH A SEVEN DAYS ADVANCE NOTICE OF ANY CONFLICT WITH PROPOSED CONSTRUCTION. THIS NOTIFICATION SHALL PROVIDE SURVEY INFORMATION ABOUT EXISTING UTILITY ALIGNMENT, GRADE AND POSSIBLE CONFLICTS. PAYMENT FOR PRE-TRENCHING, SURVEY AND BACKFILLING SHALL BE INCLUDED IN THE COST OF THE RELATED BID ITEM FOR THE WORK BEING DONE.
4. CONTRACTOR SHALL RELOCATE ANY SANITARY SEWER LATERAL AND/OR WATER SERVICE AFFECTED BY THE PROPOSED CONSTRUCTION AT NO ADDITIONAL COST TO THE TOWN OF CUTLER BAY.
5. UTILITY OWNERS:

<u>UTILITY OWNERS</u>	<u>PHONE NO.</u>	<u>CONTACT NAME</u>
ATT/DISTRIBUTION	954-723-2540	STEVE LOW
COMCAST CABLE	954-447-8405	LEONARD MAXWELL-NEWBOLD
MIAMI DADE COUNTY PUBLIC WORKS AND TRAFFIC	305-412-0891 EXT. 201	OCTAVIO VIDAL
FLORIDA CITY GAS	305-835-3650	OSCAR RODRIGUEZ
FLORIDA POWER & LIGHT	954-581-3088	ERNESTO DOMINGUEZ
MIAMI DADE WATER SEWER	786-268-5320	SERGIO GARCIA

TRAFFIC CONTROL PLAN NOTES:

1. *TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS, THE CURRENT EDITION OF THE FLORIDA DOT DESIGN STANDARDS (600 SERIES), THE STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2009 EDITION) AND MINIMUM CRITERIA.*
2. *NOTIFICATION OF LANE CLOSURES OR TEMPORARY DETOURS SHALL BE ACCOMPLISHED 14 WORKING DAYS PRIOR TO CLOSURE. SUBMIT DETOUR OR MOT PHASE CHANGE BY WITH SKETCHES, CALCULATIONS, AND OTHER DATA TO THE ENGINEER AND TOWN.*
3. *REGULATORY SPEED ESTABLISHED WITHIN WORK ZONE TRAVEL WAYS SHALL BE 35 M.P.H. REDUCED SPEED AND REGULATORY SPEED SIGNS SHALL BE INSTALLED ON SEPARATE POSTS IN ACCORDANCE WITH STANDARD INDEXES.*

EROSION AND SEDIMENTATION CONTROL NOTES:

1. TEMPORARY SEDIMENTATION CONTROL DEVICES, SUCH AS INLET PROTECTION SYSTEMS AND SEDIMENT BARRIERS SHALL BE INSTALLED AROUND INLETS BEFORE COMMENCEMENT OF WORK AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. SEDIMENT BARRIERS SHALL BE INSTALLED AT ALL CONSTRUCTION BOUNDARIES WHERE STORMWATER RUNOFF HAS THE POTENTIAL TO REACH SURFACE WATERS OR OFFSITE STORMWATER COLLECTION FACILITIES.
2. THE CONTRACTOR SHALL PRACTICE GOOD HOUSEKEEPING BY INSTITUTING A CLEAN, ORDERLY CONSTRUCTION SITE.
3. DUST RESULTING FROM PROPOSED MILLING ACTIVITIES SHALL BE PREVENTED FROM INTRUSION INTO THE STORM WATER CONVEYANCE SYSTEM. APPROPRIATE DUST CONTROL TECHNIQUES SUCH AS STREET SWEEPING AND/OR TRUCK WATERING MUST BE RETAINED ON SITE OR PERFORMED AT THE END OF EACH WORK DAY. THE USE OF CALCIUM CHLORIDE, OILS OR OTHER CHEMICAL DUST CONTROL AGENT SHALL BE AVOIDED.
4. CONTRACTOR SHALL SOD GRASS AREAS DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES).
5. THE SWPPP MUST BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION AND BE ACCESSIBLE AT ALL TIMES, AT THE CONSTRUCTION SITE. THE CONTRACTOR IS ADVISED THAT HE SHALL CONFORM TO THE REQUIREMENTS AND SHALL IMPLEMENT ALL OF THE MEASURES REQUIRED BY THE SWPPP, INCLUDING MAINTENANCE AND DILIGENT RECORD KEEPING AND LOGS AS REQUIRED BY THE SWPPP.
6. EROSION CONTROL AND SEDIMENT CONTROL MUST BE IMPLEMENTED FOR THE DURATION OF THE CONSTRUCTION PROJECT, ON A CONTINUOUS BASIS, UPDATED, AS SITE CONDITIONS WARRANT.

REVISIONS		<div><p><b>R.J.Behar &amp; Company, Inc.</b> Engineers • Planners 6861 SW 196TH AVENUE, SUITE 302 PEMBROKE PINES, FLORIDA 33332 CERTIFICATE OF AUTHORIZATION 00008365 HANS MURZI, PE P.E. LICENSE No.: 67767</p></div>	<div><p><b>Cutler Bay</b> FLORIDA ESTABLISHED 2005</p></div>	<div><p><i>GENERAL NOTES</i></p></div>	SHEET NO.
DATE	DESCRIPTION				
				2	

TABULATION OF QUANTITIES				
FDOT PAY ITEM NO.	CITY BID NO.	DESCRIPTION	QUANTITY	UNIT
101-1	1	MOBILIZATION	1	LS
102-1	2	MAINTENANCE OF TRAFFIC	1	LS
104-18	3	INLET PROTECTION SYSTEM	30	EA
110-1-1	4	CLEARING AND GRUBBING	0.04	AC
N/A	5	CATCH BASINS (INCLUDES COST OF CONCRETE APRON AND BAFFLES)	10	EA
425-2-41	6	MANHOLE, P-7, <10'	6	EA
425-2-71	7	MANHOLE, J-7, <10'	2	EA
430-83-0	8	PIPE FILLING AND PLUGGING	1.0	CY
430-94-1	9	DESILTING PIPE, 0-24" (INCLUDES COST OF CLEANING 8 CATCH BASINS)	941	LF
430-94-2	10	DESILTING PIPE, 25-36" (INCLUDES COST OF CLEANING 1 CATCH BASIN)	174	LF
430-94-3	11	DESILTING PIPE, 37-48" (INCLUDES COST OF CLEANING 2 CATCH BASINS)	408	LF
430-175-115	12	PIPE CULVERT OPTIONAL MATERIAL ROUND, 15" S/CD (INCLUDES COST OF 3 CONCRETE COLLARS)	41	LF
430-175-118	13	PIPE CULVERT OPTIONAL MATERIAL ROUND, 18" S/CD	121	LF
430-175-124	14	PIPE CULVERT OPTIONAL MATERIAL ROUND, 24" S/CD	753	LF
430-175-142	15	PIPE CULVERT OPTIONAL MATERIAL ROUND, 42" S/CD (INCLUDES COST OF 2 CONCRETE COLLARS)	10	LF
443-70-4	16	FRENCH DRAIN, 24"	400	LF
522-1	17	CONCRETE SIDEWALK AND DRIVEWAYS, 4" (SIDEWALK RECONSTRUCTION)	7	SY
522-2	18	CONCRETE SIDEWALK AND DRIVEWAYS, 6" (DRIVEWAY RECONSTRUCTION)	36	SY
570-1-2	19	PERFORMANCE TURF, SOD	79	SY
327-70-1	20	MILL EXISTING ASPHALT PAVEMENT (1" AVG DEPTH)	14816	SY
N/A	21	RESURFACE WITH TYPE S-1 ASPHALTIC CONCRETE (1" AVG)	818.8	TN
706-3	22	RETRO-REFLECTIVE PAVEMENT MARKERS	43	EA
710-111-01	23	PAINTED PAVEMENT MARKING, STD, WHITE, SOLID, 6"	0.047	GM
710-111-23	24	PAINTED PAVEMENT MARKING, STD, WHITE, SOLID, 12"	188	LF
710-111-25	25	PAINTED PAVEMENT MARKING, STD, WHITE, SOLID, 24"	84	LF
710-112-01	26	PAINTED PAVEMENT MARKING, STD, YELLOW, SOLID, 6"	0.142	GM
710-112-31	27	PAINTED PAVEMENT MARKING, STD, YELLOW, SKIP, 6"	0.347	GM

NOTE:

1. CITY BID No. 5 CATCH BASIN PER METROPOLITAN DADE COUNTY PUBLIC DEPARTMENT AND SKIMMERS PER CITY OF MIAMI DEPARTMENT OF PUBLIC WORKS STANDARDS (SEE DRAINAGE DETAILS).

- LEGEND:
- +2.0

EXISTING ELEVATIONS
- Ⓢ

EXISTING SANITARY MANHOLE
- RUNOFF DIRECTION
- WATER VALVE
- P.R.B.

POLLUTANT RETARDANT BAFFLE
- BTv - - - - -

COMCAST BURRIED CABLE
- BT - - - - -

AT&T BURRIED CABLE
- W - - - - -

M-DWASD WATER
- S - - - - -

M-DWASD SANITARY SEWER
- FM

M-DWASD SANITARY FORCE MAIN
- G - - - -

GAS
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- - - - -

RIGHT-OF-WAY (R/W)
- ED

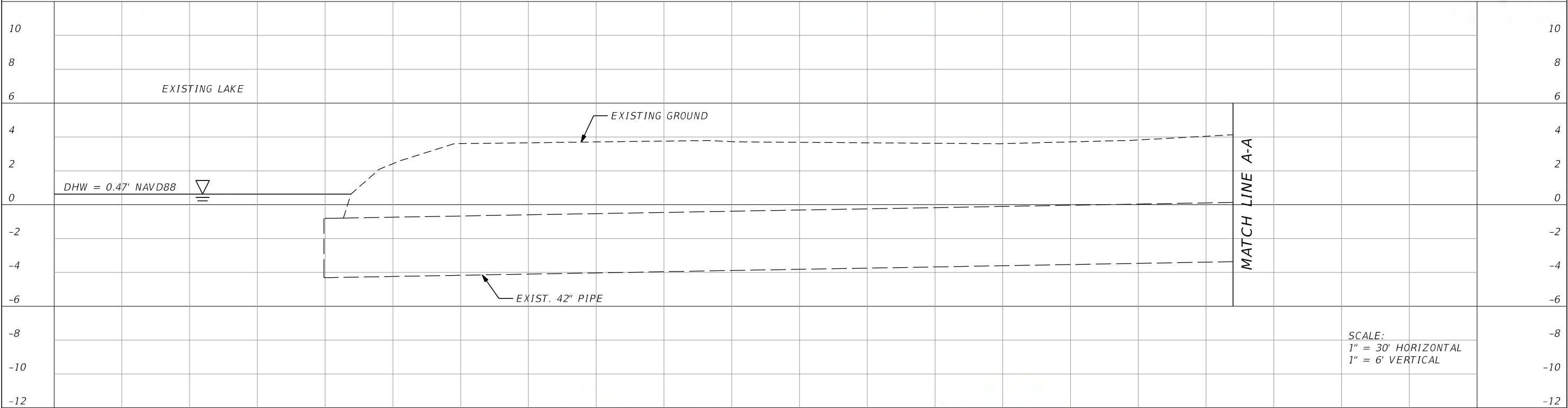
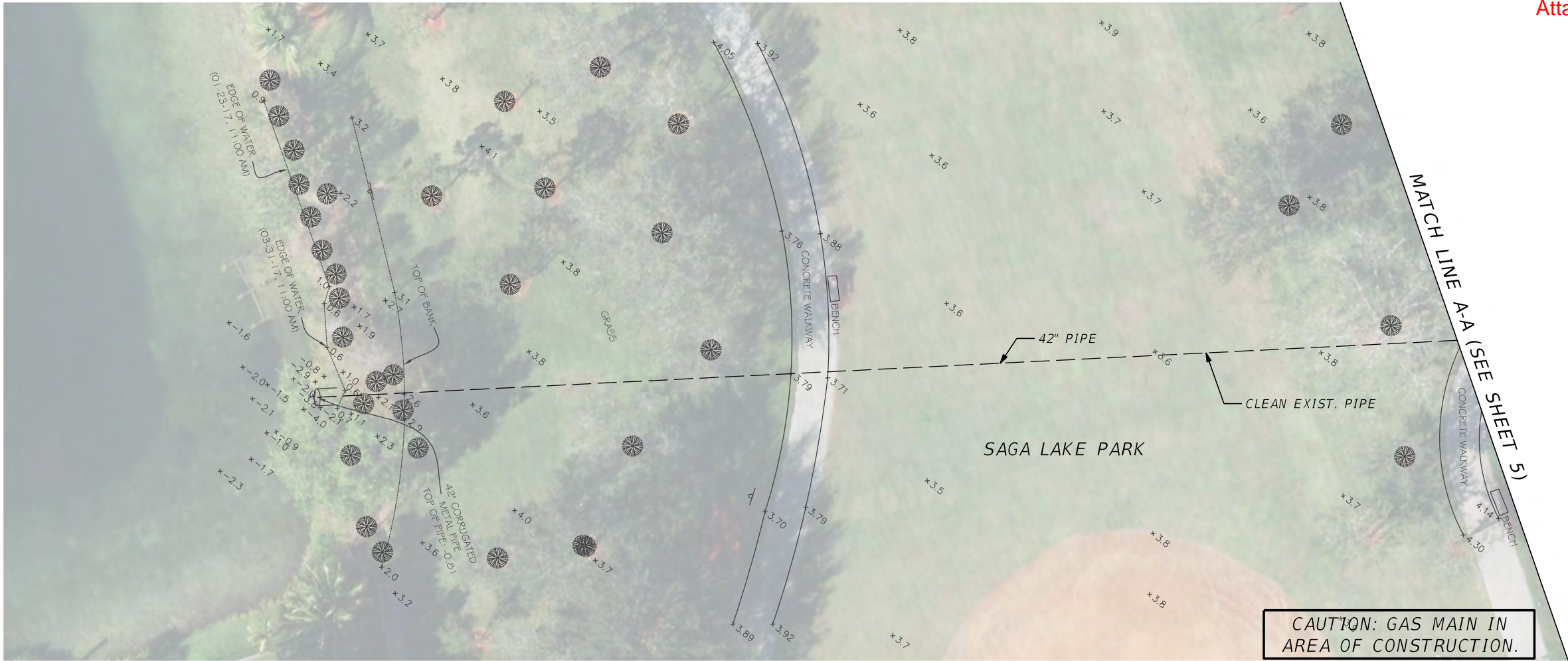
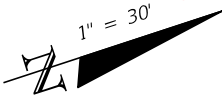
EACH DAY
- DA

DAY
- EA

EACH
- FD

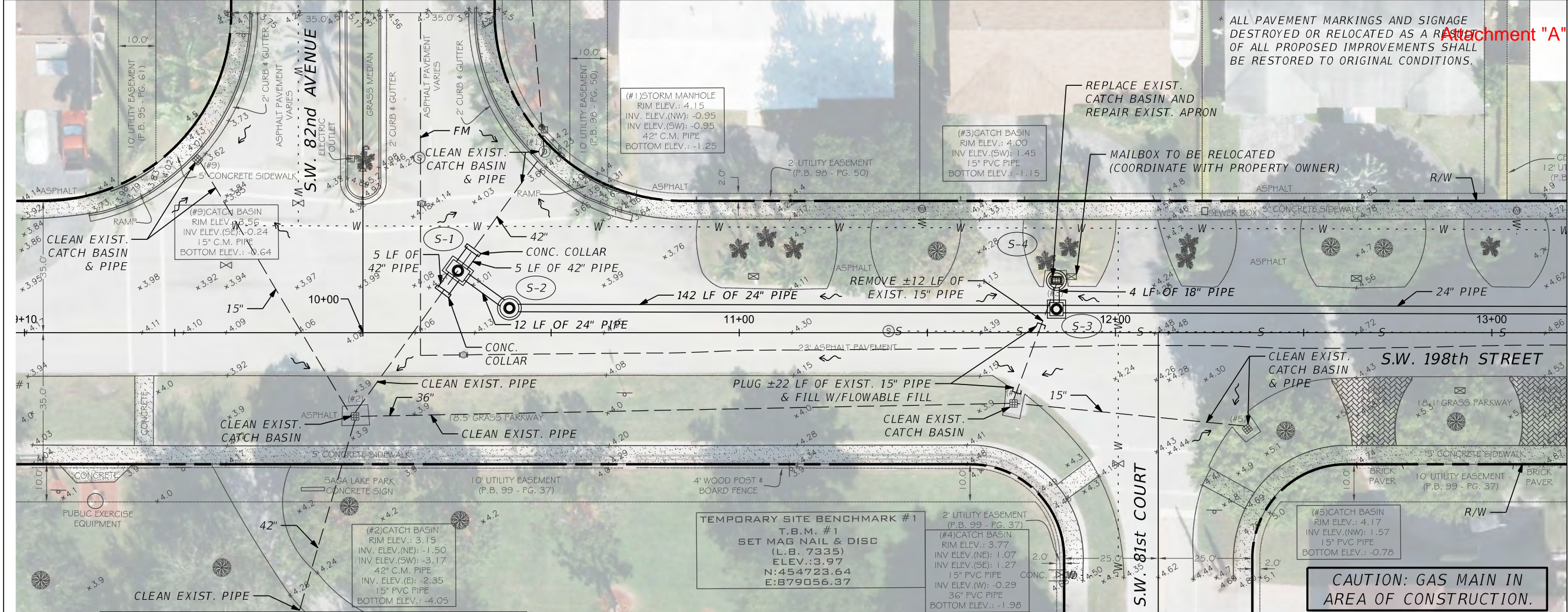
FRENCH DRAIN
- PROPOSED CATCH BASIN W/ APRON
- PROPOSED STORM WATER MANHOLE
- PROPOSED FRENCH DRAIN
- EXISTING MAILBOX





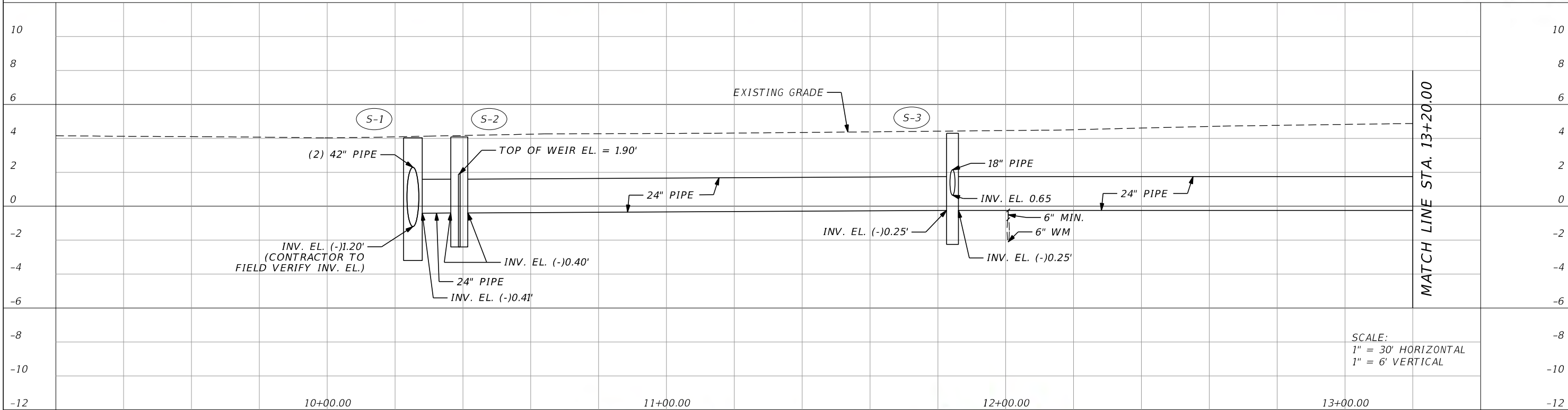
REVISIONS		BID SET	<div><b>R.J.Behar &amp; Company, Inc.</b> Engineers + Planners 6861 SW 196TH AVENUE, SUITE 302 PEMBROKE PINES, FLORIDA 33332 CERTIFICATE OF AUTHORIZATION 00008365 HANS MURZI, PE P.E. LICENSE No.: 67767</div>	<div></div>	SAGA BAY 1.2 SUB-BASIN PLAN & PROFILE (1 OF 6)	SHEET NO.
DATE	DESCRIPTION					
						4





MATCH LINE STA. 13+20.00

MATCH LINE A-A (SEE SHEET 4)



SCALE:  
1" = 30' HORIZONTAL  
1" = 6' VERTICAL

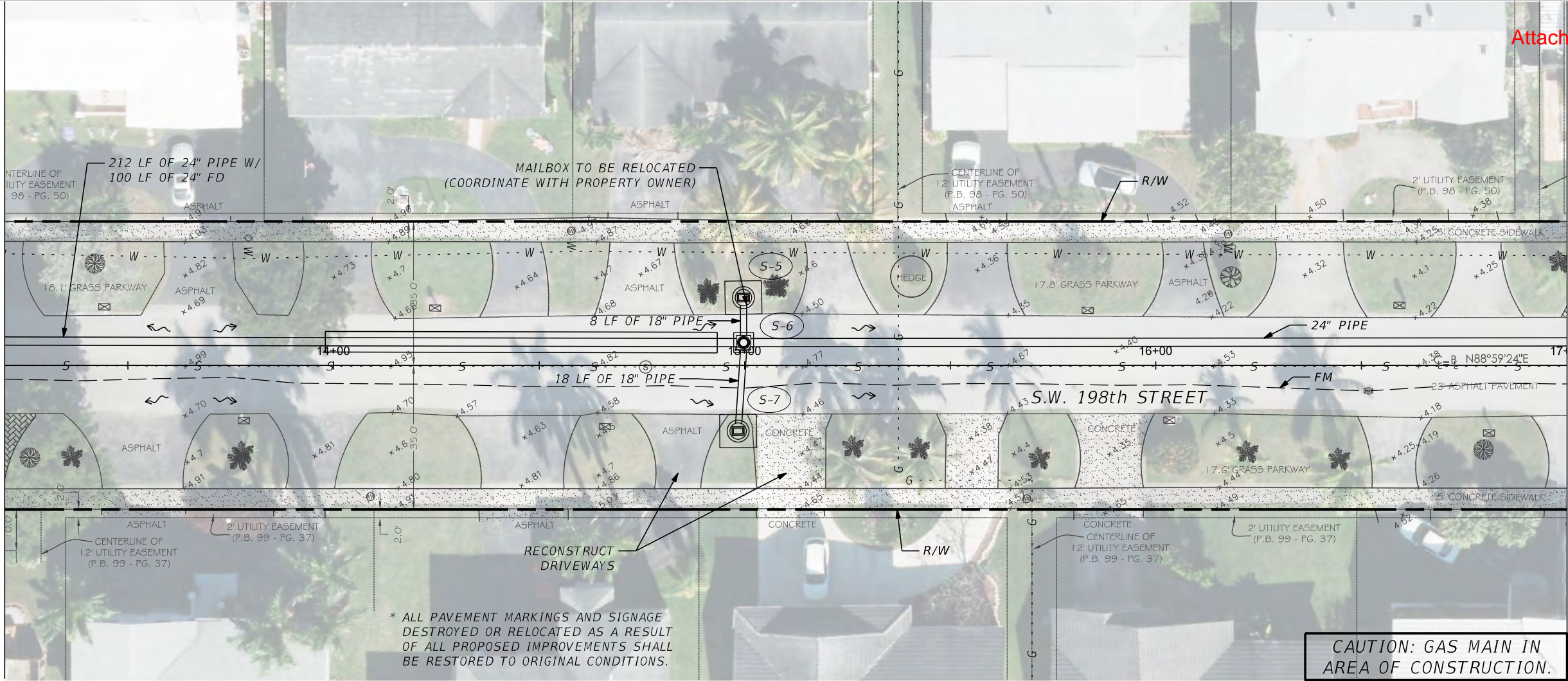
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DATE	DESCRIPTION					
						5





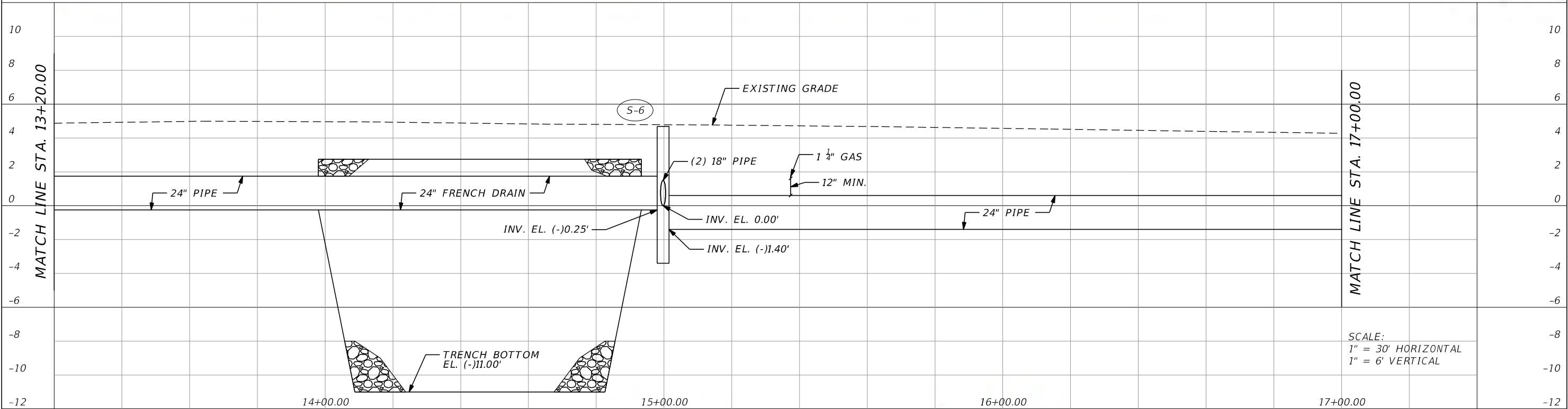
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MATCH LINE STA. 17+00.00



\* ALL PAVEMENT MARKINGS AND SIGNAGE DESTROYED OR RELOCATED AS A RESULT OF ALL PROPOSED IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL CONDITIONS.

CAUTION: GAS MAIN IN AREA OF CONSTRUCTION.



SCALE:  
1" = 30' HORIZONTAL  
1" = 6' VERTICAL

REVISIONS	
DATE	DESCRIPTION

BID SET

**R.J.Behar & Company, Inc.**  
Engineers - Planners  
6861 SW 196TH AVENUE, SUITE 302  
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**SAGA BAY 1.2 SUB-BASIN  
PLAN & PROFILE (3 OF 6)**

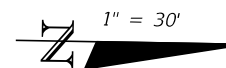
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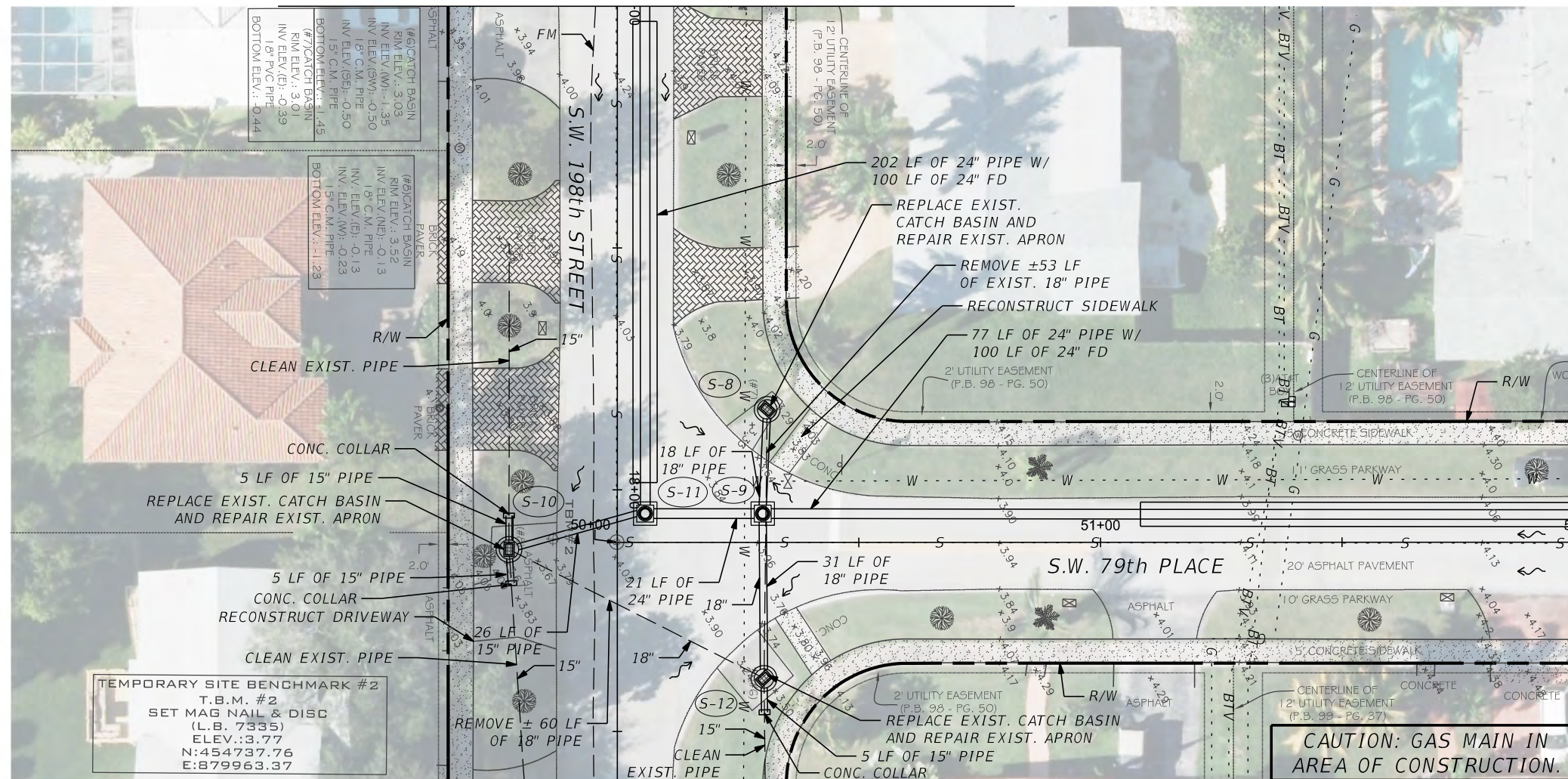


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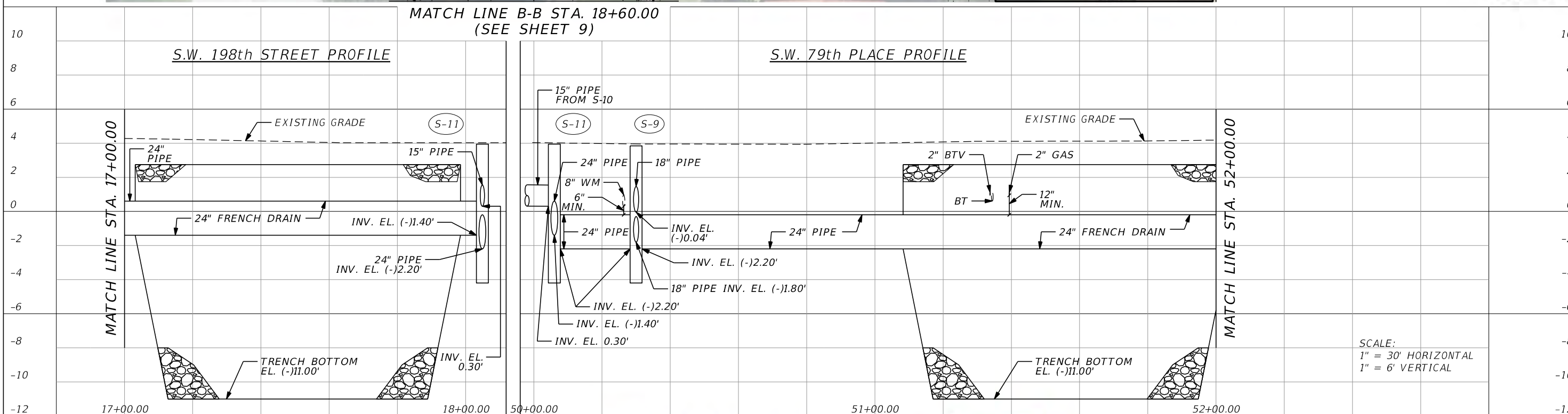
Attachment "A" (Page 7 of 16)



\* ALL PAVEMENT MARKINGS AND SIGNAGE DESTROYED OR RELOCATED AS A RESULT OF ALL PROPOSED IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL CONDITIONS.



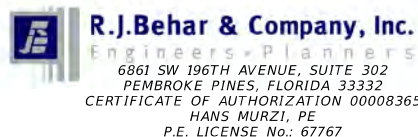
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MATCH LINE B-B STA. 18+00.00  
(SEE SHEET 9)S.W. 198th STREET PROFILES.W. 79th PLACE PROFILE

SCALE:  
1" = 30' HORIZONTAL  
1" = 6' VERTICAL

REVISIONS	
DATE	DESCRIPTION

BID SET



SAGA BAY 1.2 SUB-BASIN  
PLAN & PROFILE (4 OF 6)

SHEET  
NO.

7

spatxot

9/25/2017

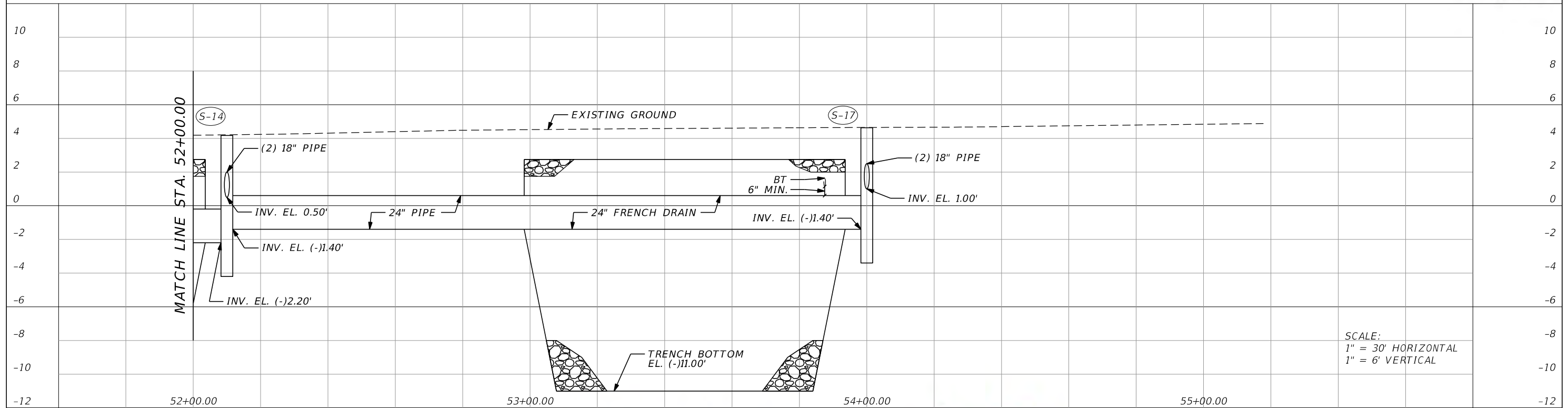
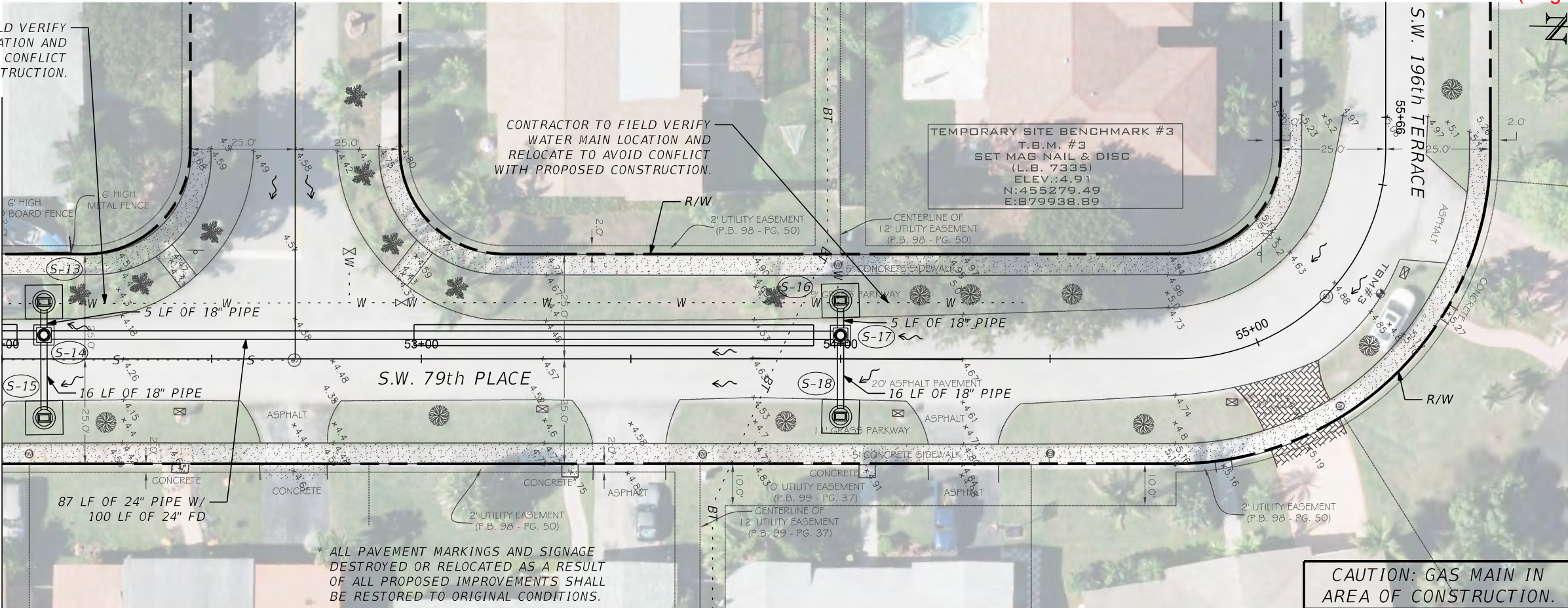
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CONTRACTOR TO FIELD VERIFY  
WATER MAIN LOCATION AND  
RELOCATE TO AVOID CONFLICT  
WITH PROPOSED CONSTRUCTION.


MATCH LINE STA. 52+00.00



SCALE:  
1" = 30' HORIZONTAL  
1" = 6' VERTICAL

REVISIONS	
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**R.J.Behar & Company, Inc.**  
Engineers - Planners  
6861 SW 196TH AVENUE, SUITE 302  
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P.E. LICENSE No.: 67767



SAGA BAY 1.2 SUB-BASIN  
PLAN & PROFILE (5 OF 6)


SHEET  
NO.  
8





REVISIONS	
DATE	DESCRIPTION

BID SET



**R.J.Behar & Company, Inc.**  
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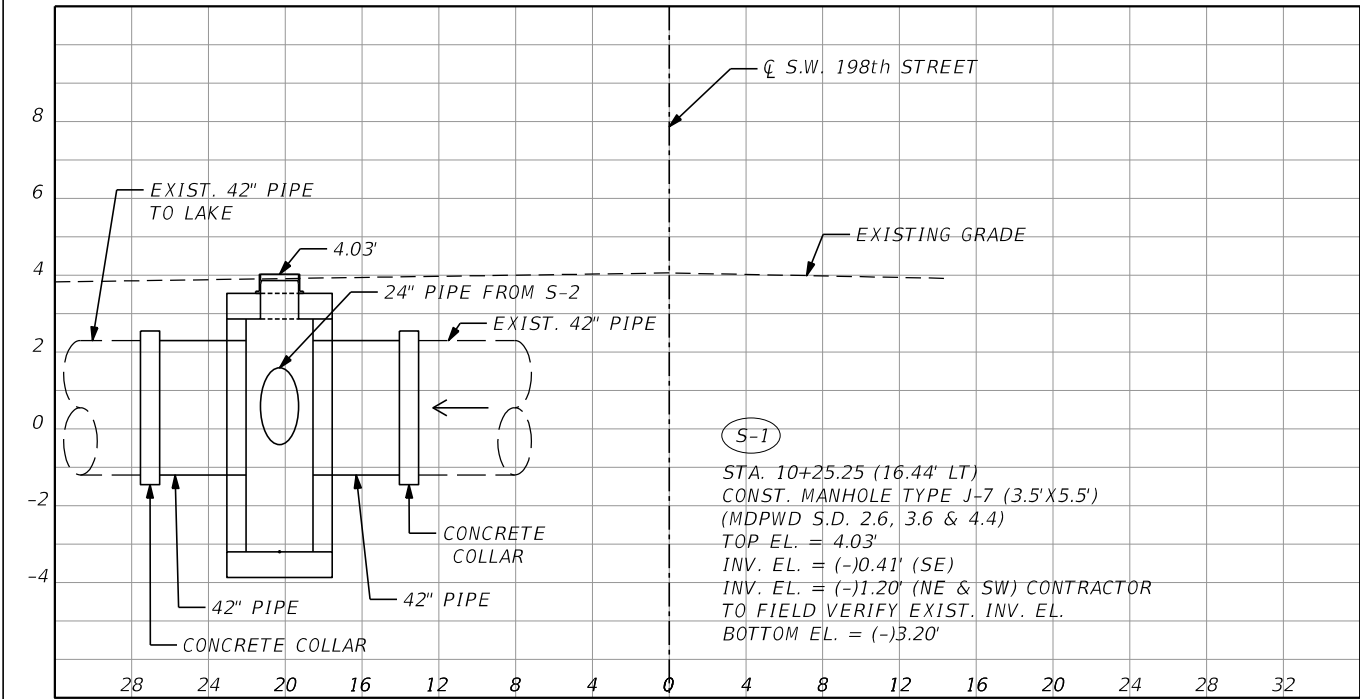


SAGA BAY 1.2 SUB-BASIN  
PLAN (6 OF 6)

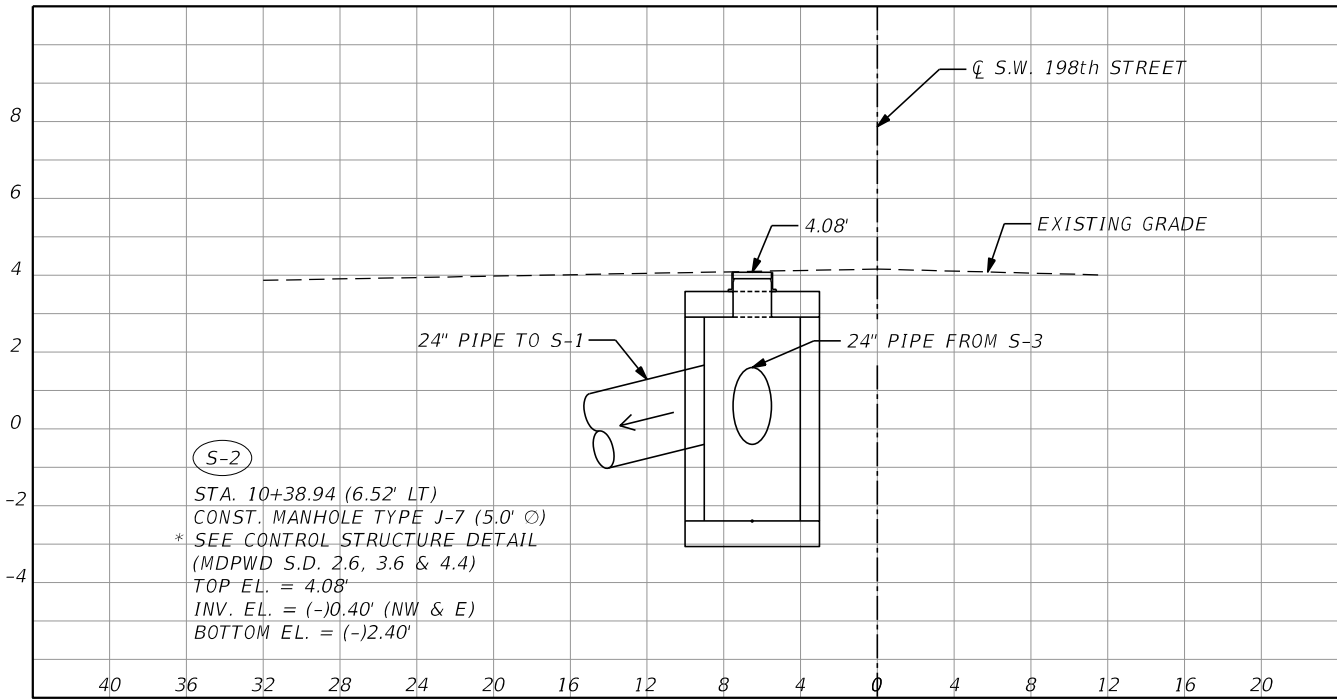
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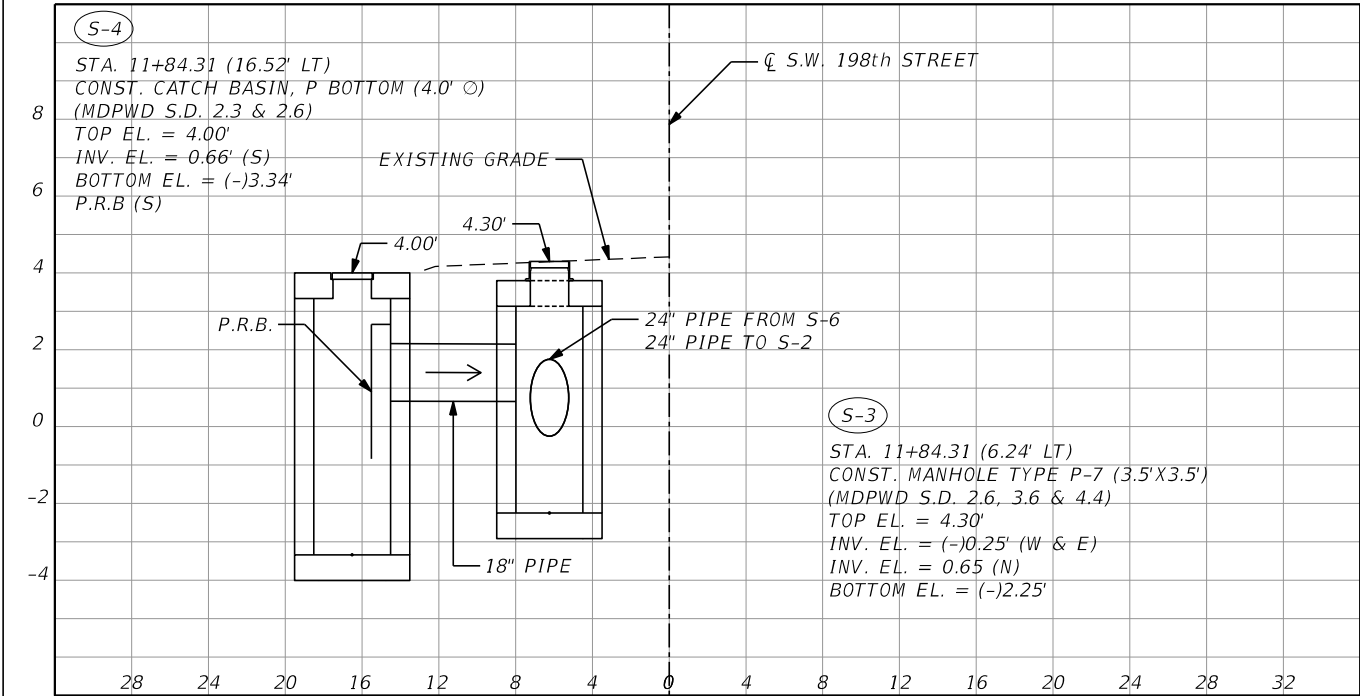
DIAGONAL  
SW 82nd AVE & SW 198th ST



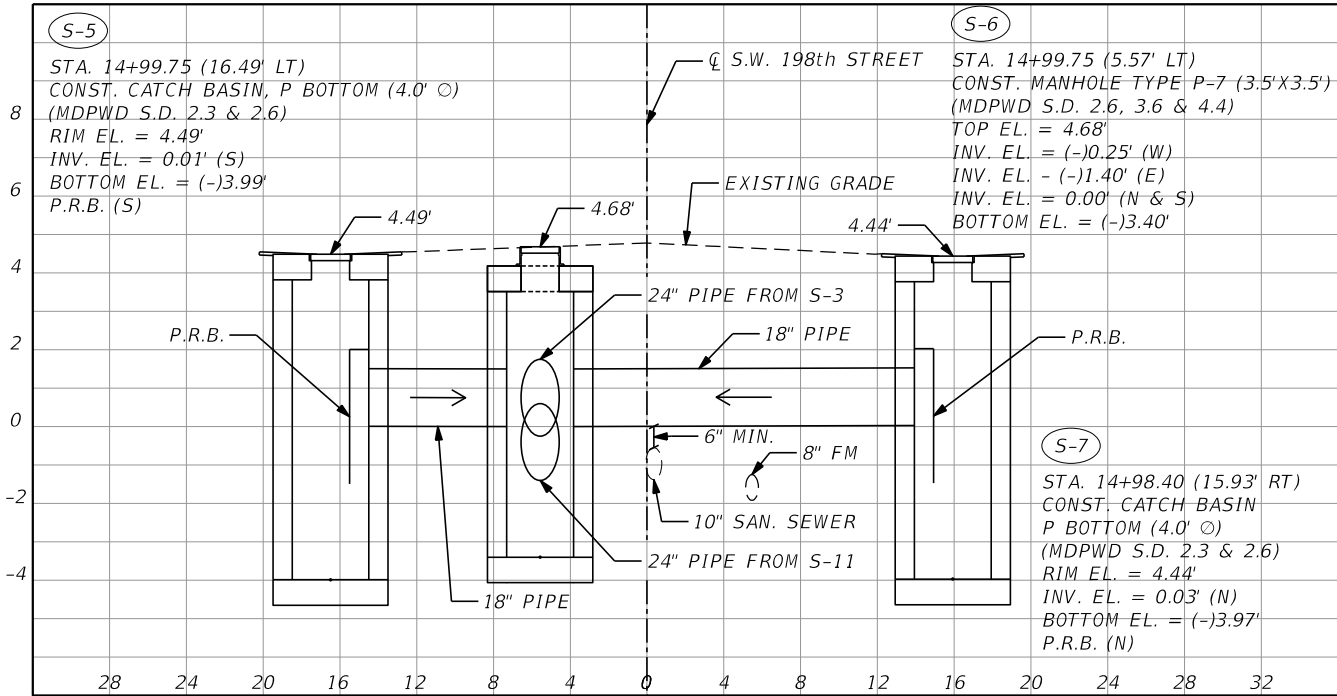
STA. 10+38.94

SCALE:

H: 1" = 10'  
V: 1" = 5'



STA. 11+84.31



STA. 14+99.75

REVISIONS	
DATE	DESCRIPTION

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**R.J.Behar & Company, Inc.**  
Engineers + Planners  
6861 SW 196TH AVENUE, SUITE 302  
PEMBROKE PINES, FLORIDA 33332  
CERTIFICATE OF AUTHORIZATION 00008365  
HANS MURZI, PE  
P.E. LICENSE No.: 67767

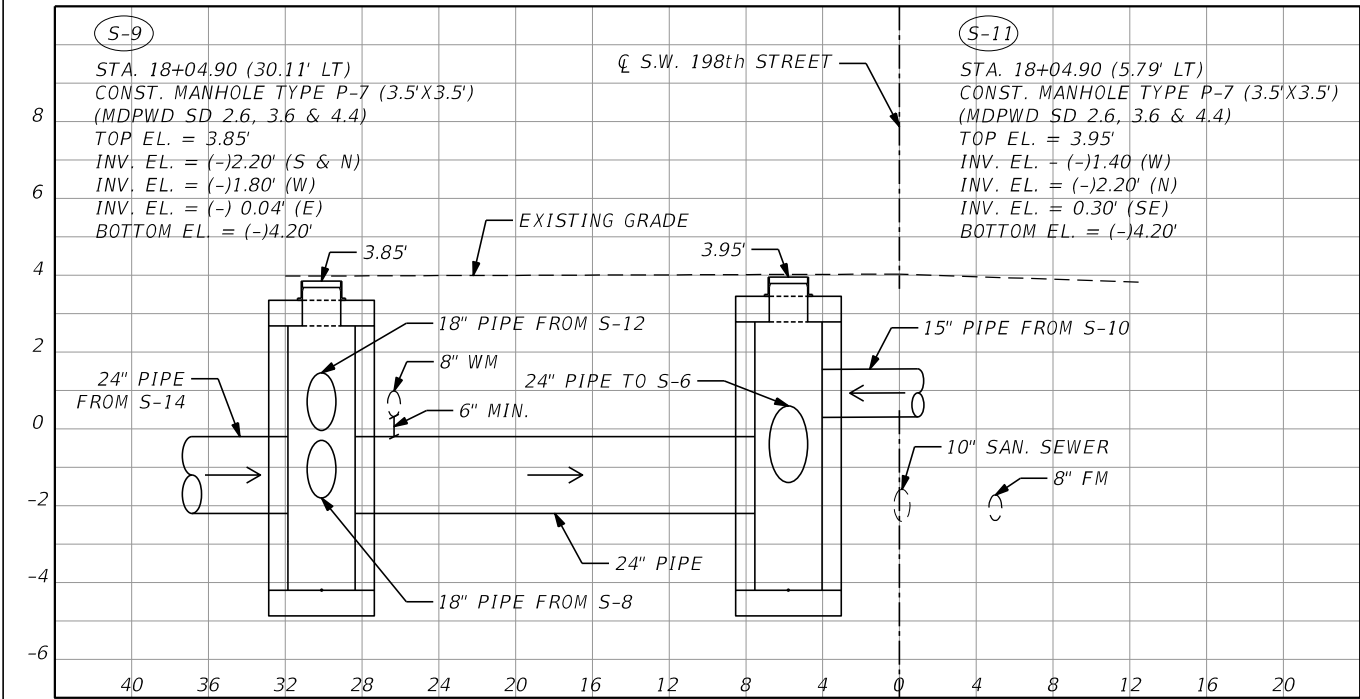


*SAGA BAY 1.2 SUB-BASIN  
STRUCTURE SHEETS (1 OF 3)*

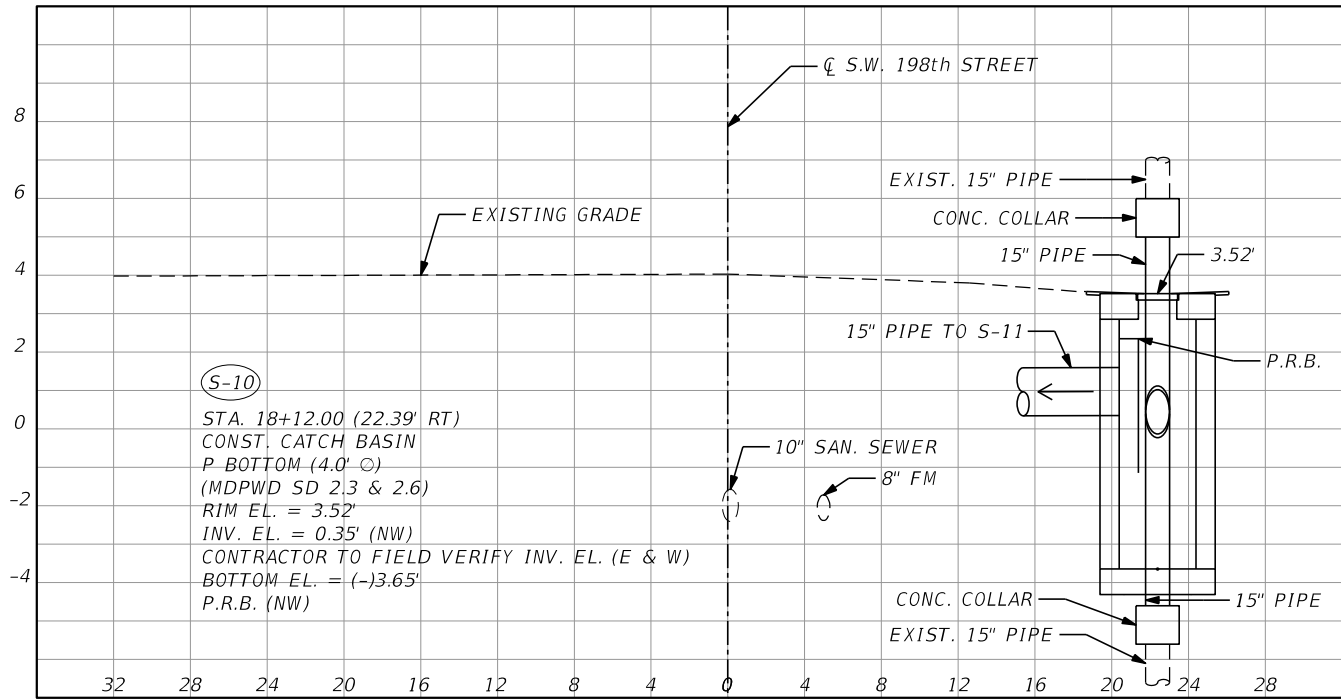
SHEET  
NO.

10





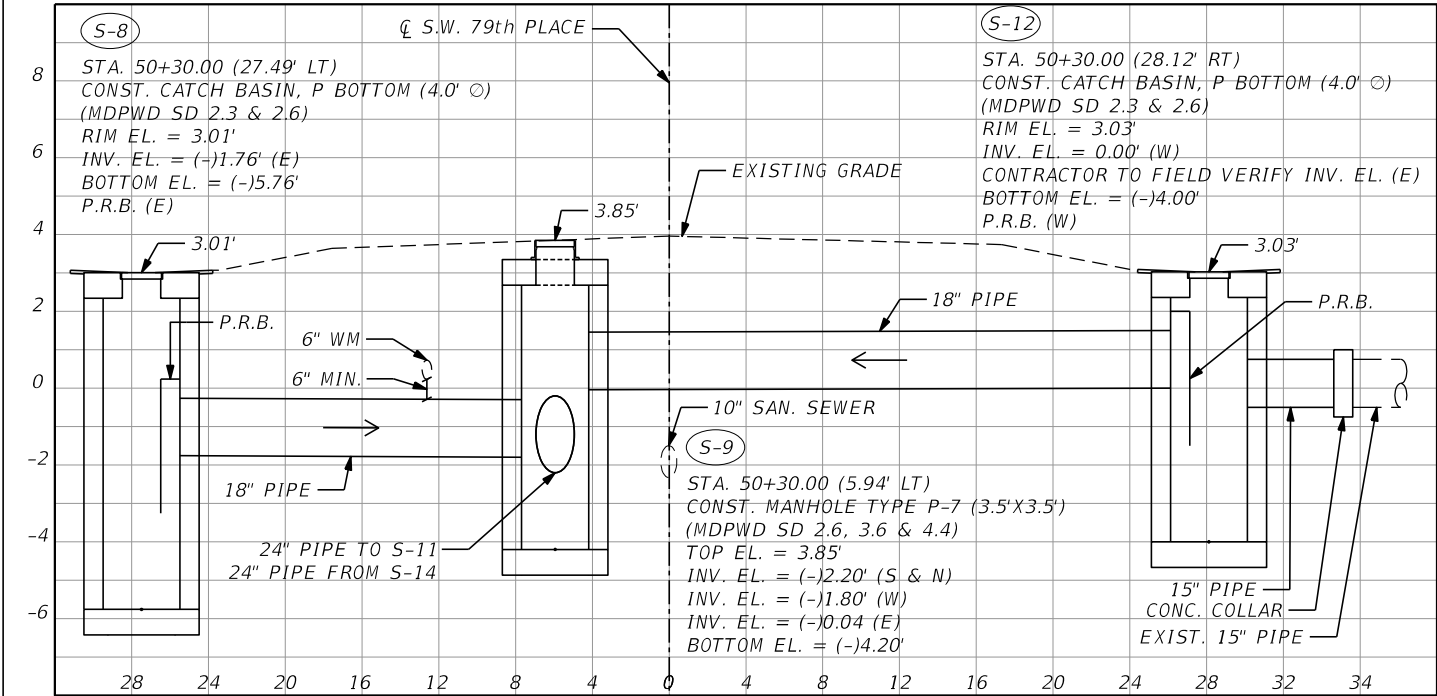
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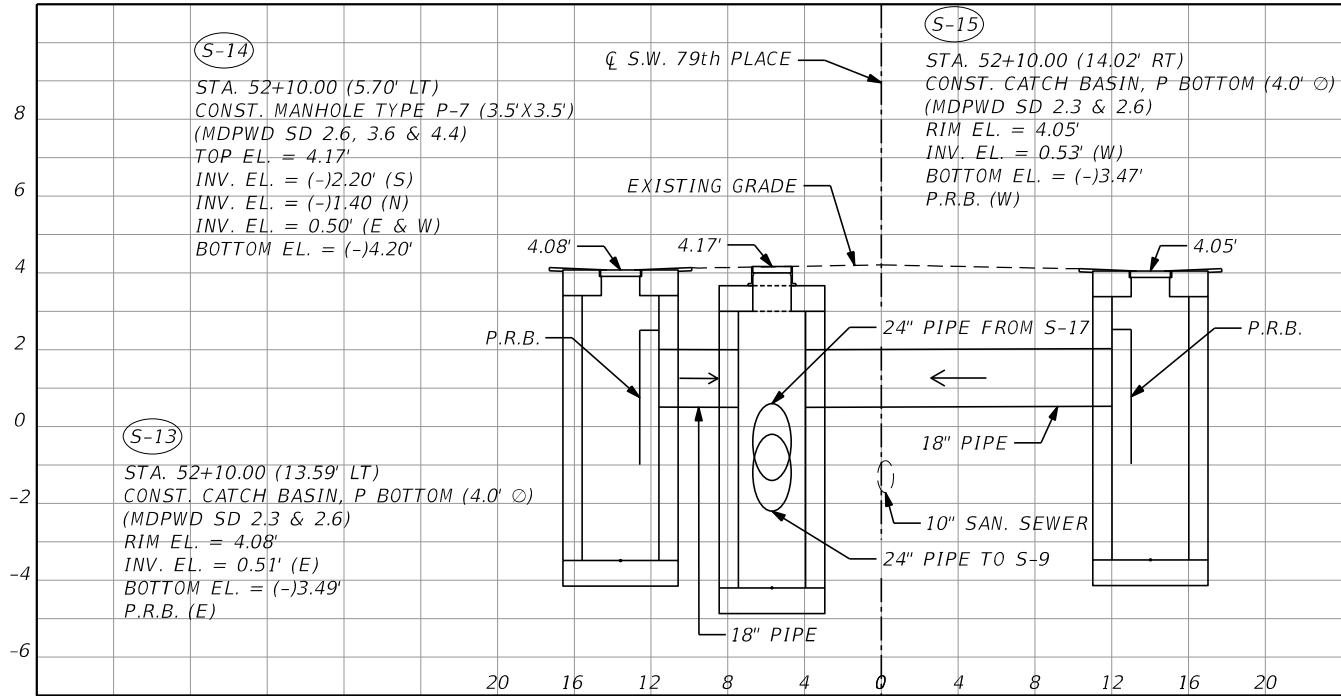
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SCALE:

H: 1" = 10'  
V: 1" = 5'



STA. 50+30.10



STA. 52+10.00

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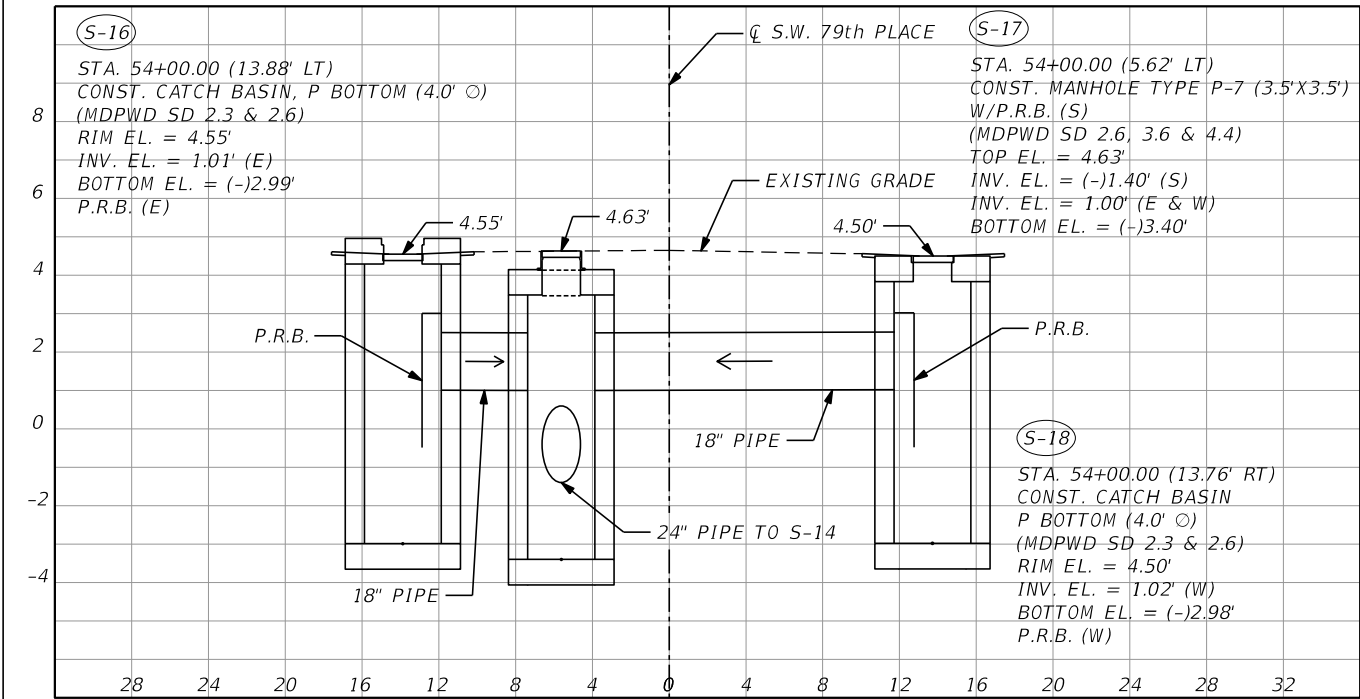


**SAGA BAY 1.2 SUB-BASIN**  
**STRUCTURE SHEETS (2 OF 3)**

SHEET  
NO.

11





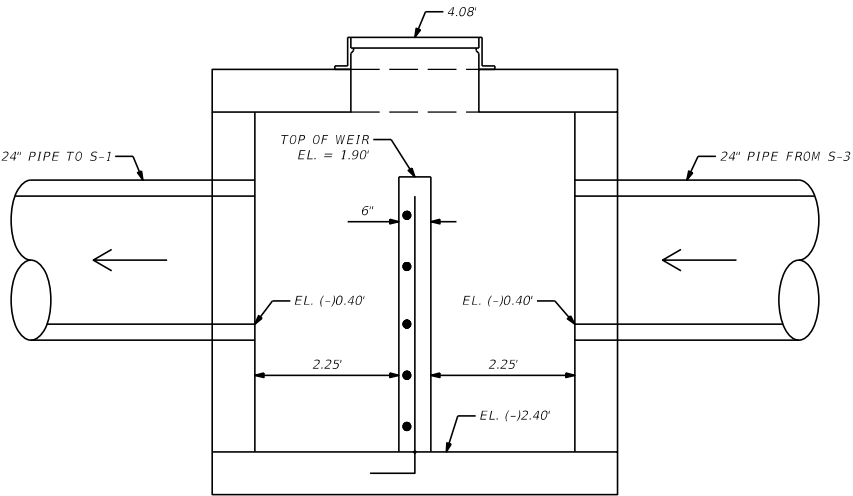
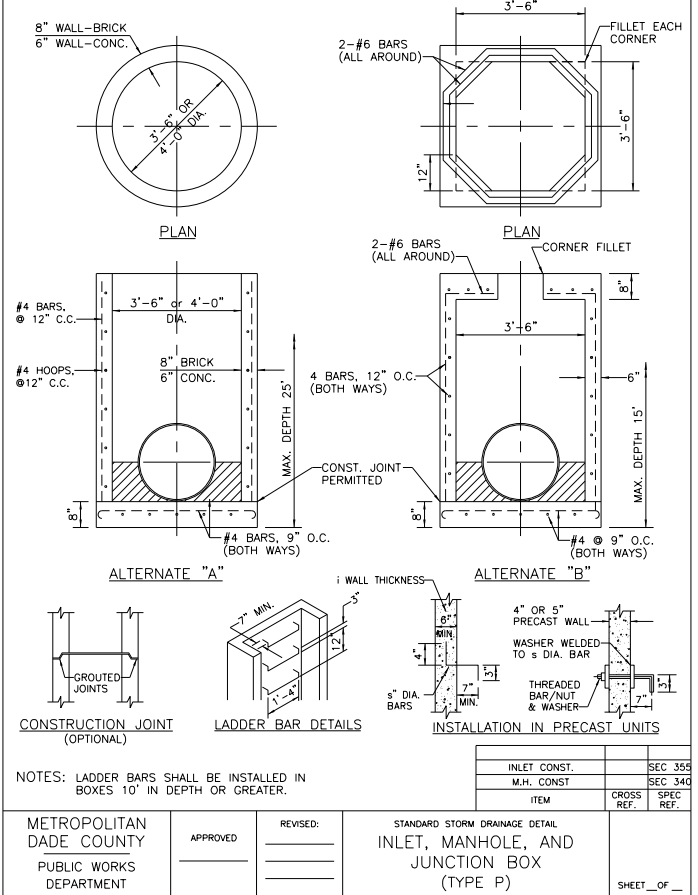
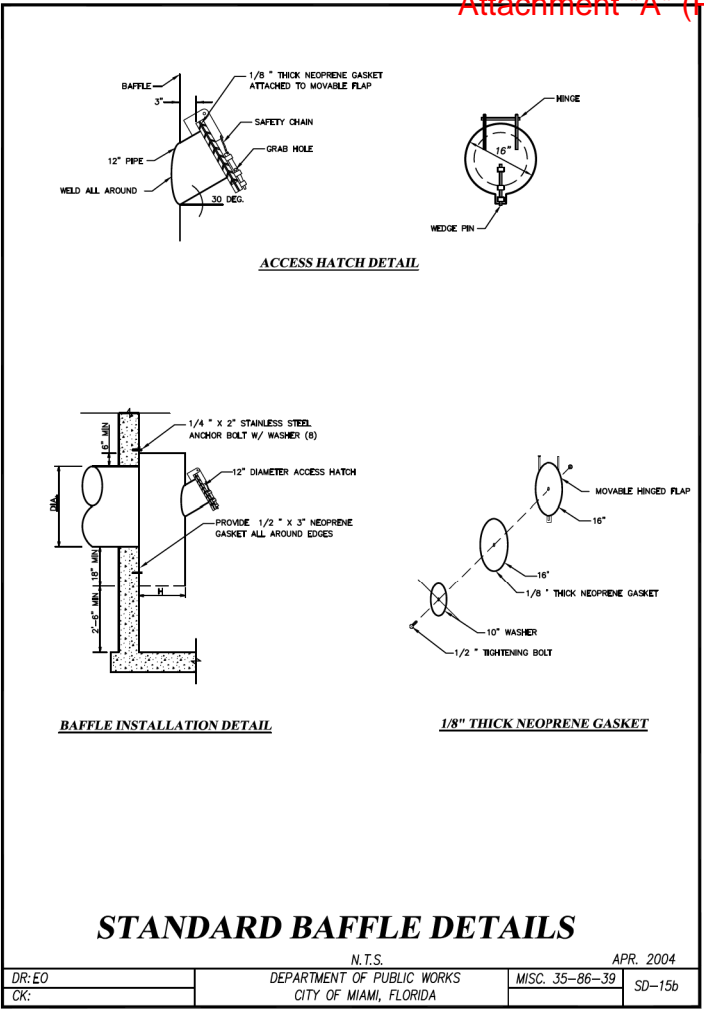
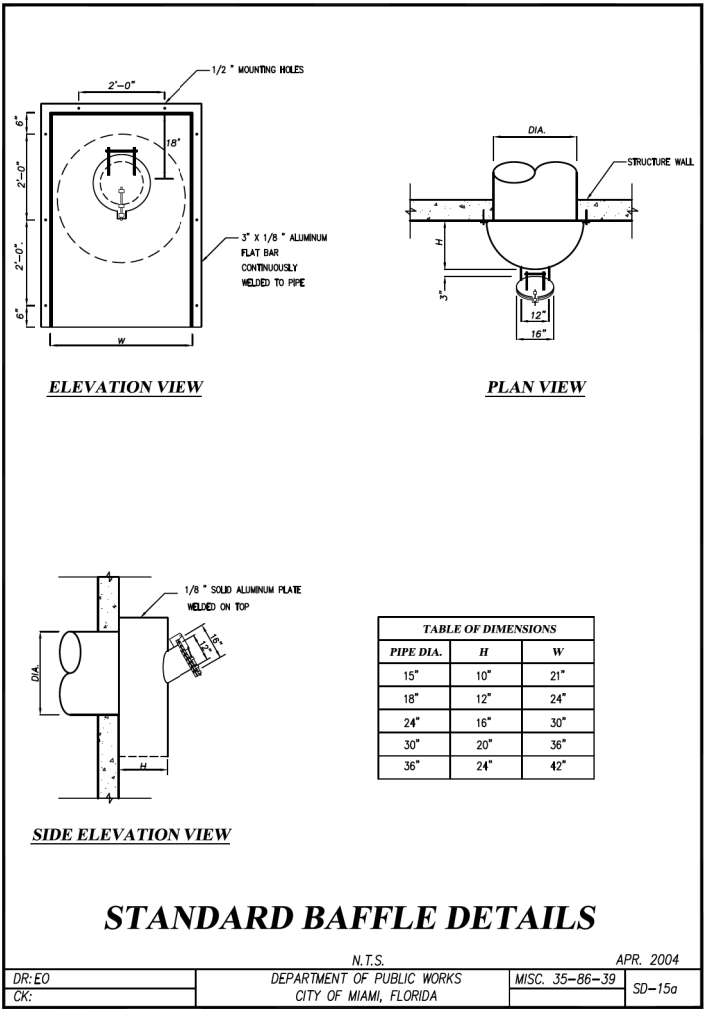
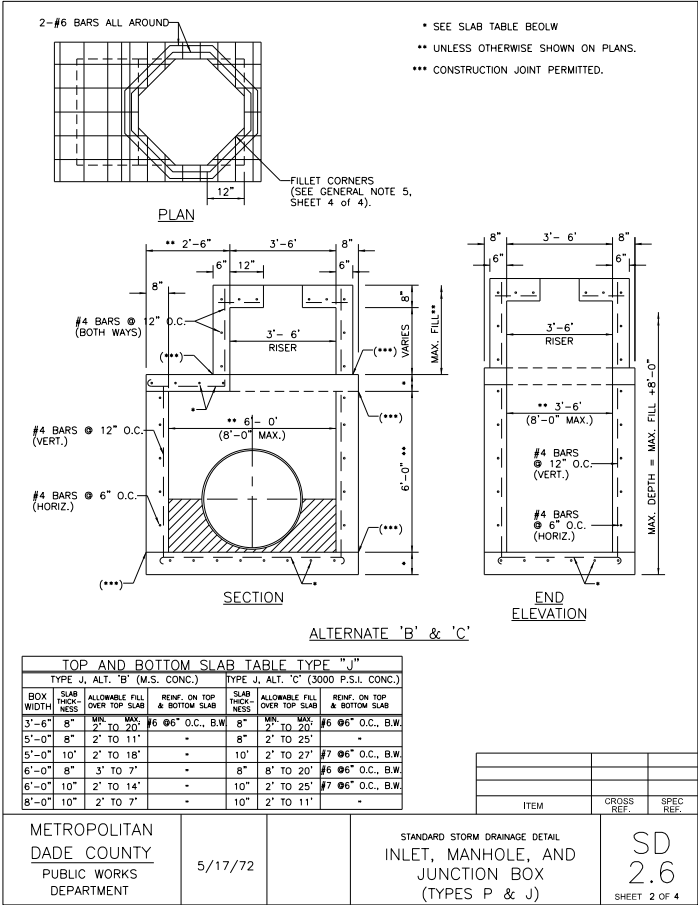
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SCALE:  
H: 1" = 10'  
V: 1" = 5'









CONTROL STRUCTURE DETAIL (S-2)  
N.T.S.

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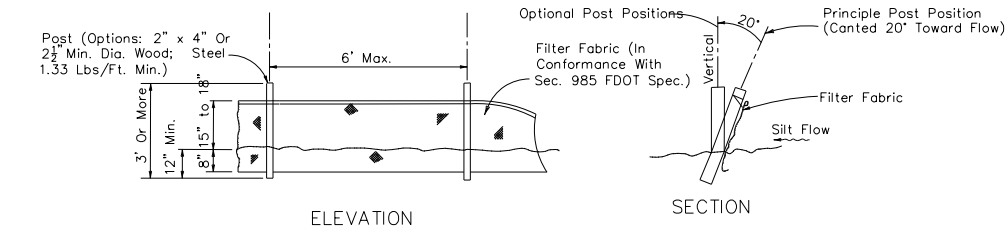


DRAINAGE DETAILS (2 OF 2)

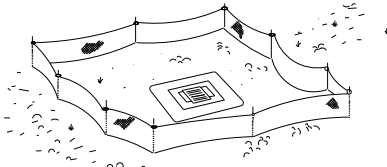
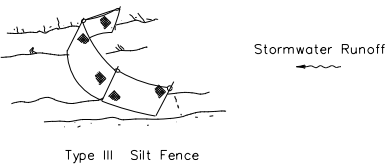
SHEET NO.

14





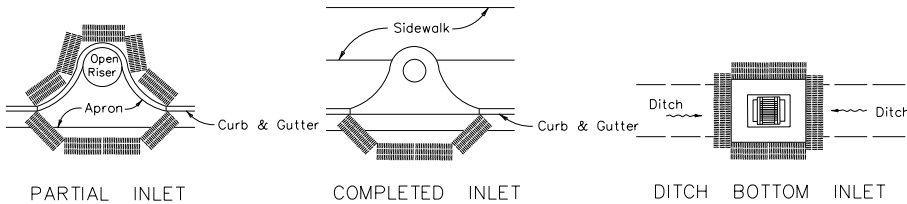
SILT FENCE DETAIL  
N.T.S.



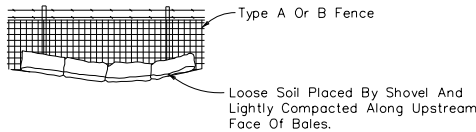
Notes:

1. Spacing for Type III Fence to be in accordance with Chart 1, Sheet 1 of 3 and ditch installations at drainage structures Sheet 2 of 3 per FDOT Standard Index 102.
2. Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS  
N.T.S.



PROTECTION AROUND INLETS OR SIMILAR STRUCTURES  
N.T.S.



BALES BACKED BY FENCE  
N.T.S.

NOTES FOR SYNTHETIC BALES OR BALE TYPE BARRIERS

1. Type I and II Synthetic Barrier should be spaced in accordance with Chart 1, sheet 1 per Index 102.
2. Bales shall be anchored with 2-1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
3. Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if approved by the Engineer.
4. Adjacent bales shall be butted firmly together.
5. Where used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.

STORM WATER POLLUTION PREVENTION PRACTICES:  
(FOR PROJECTS OF 0.5 ACRE OR MORE)

1. TREE PROTECTION AND PRUNING SHALL BE ACCOMPLISHED AS DETAILED IN SPECIAL PROVISIONS, THE CONSTRUCTION PLANS, AND OR PER TREE ORDINANCE 12636.
2. THE STORM WATER POLLUTION PREVENTION PLAN, SWPPP, SUBMITTED TO PUBLIC WORKS, SHALL DESCRIBE IN DETAIL HOW THE CONSTRUCTION EFFORT WILL BE PHASED WITH REGARDS TO MINIMIZING EROSION PROBLEMS BY THE USE OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES, FOR THE VARIOUS SEQUENCES OF CONSTRUCTION OPERATIONS.
3. ENVIRONMENTAL CONTROL FEATURES AS PROVIDED IN THE SWPPP, ARE TO BE INSTALLED AT ALL AREAS OF EXCAVATION OR FILL FOR DRAINAGE SYSTEM, OR STRUCTURE CONSTRUCTION PRIOR TO SUCH EXCAVATION OR FILL. INLET ENTRANCES ARE ALSO TO BE PROTECTED FROM SILTATION AS DETAILED ON THIS SHEET.
4. ALL ENVIRONMENTAL CONTROL FEATURES ARE TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT IN ACCORDANCE WITH N.P.D.E.S. REQUIREMENTS. THE CONTRACTOR MUST INSURE THAT ALL EROSION CONTROL FEATURES FUNCTION PROPERLY AT ALL TIMES.
5. ALL EROSION AND MATERIAL DEPOSITS MUST BE CONTAINED WITHIN THE PROJECT LIMITS.
6. ANY DAMAGED OR INEFFECTIVE ROCK BAGS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION OF ROCK BAGS INSTALLATION IS AS MENTIONED IN THE SWPPP PLANS. THE PROJECT ENGINEER MAY SPECIFY OTHER AREAS AS NECESSARY.
7. DITCH BOTTOM INLETS SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE INLET TOP SHALL NOT BE HIGHER THAN INLET TOP. ROCK BAGS SHALL BE INSTALLED AROUND INLET TOP. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH ROCK BAGS TO PREVENT SEDIMENT INTAKE.
8. CURB INLETS ALSO SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPLETE. ALL EXPOSED SLOPED MATERIAL ADJACENT TO INLET, SHALL BE COVERED WITH EROSION CONTROL MATTING WITH OUTER LIMITS PROTECTED BY ROCK BAGS.
9. STOCKPILED MATERIAL SHALL NOT BE LEFT IN EROSION PRONE AREAS UNLESS PROTECTED BY COVER OR ROCK BAGS.
10. INSPECTION OF EROSION CONTROL MEASURES AND CONDITION OF ADJACENT PROPERTIES, SHALL BE PERFORMED DAILY BY THE CONTRACTOR'S REPRESENTATIVE AND THE PROJECT ENGINEER. DEFICIENCIES SHALL BE NOTED AND CORRECTED.
11. ANY OFFSITE SEDIMENT DISCHARGE TO A MUNICIPAL SEPARATE STORM WATER SYSTEM ARISING FROM THE CONTRACTOR'S ACTIVITIES IS NOT ALLOWED.
12. THE USE OF SANITARY SEWERS, FRENCH DRAINS, COVER DITCHES AND/OR ROCK DRAINS FOR THE DISPOSAL OF WASTEWATER IS EXPRESSLY PROHIBITED.

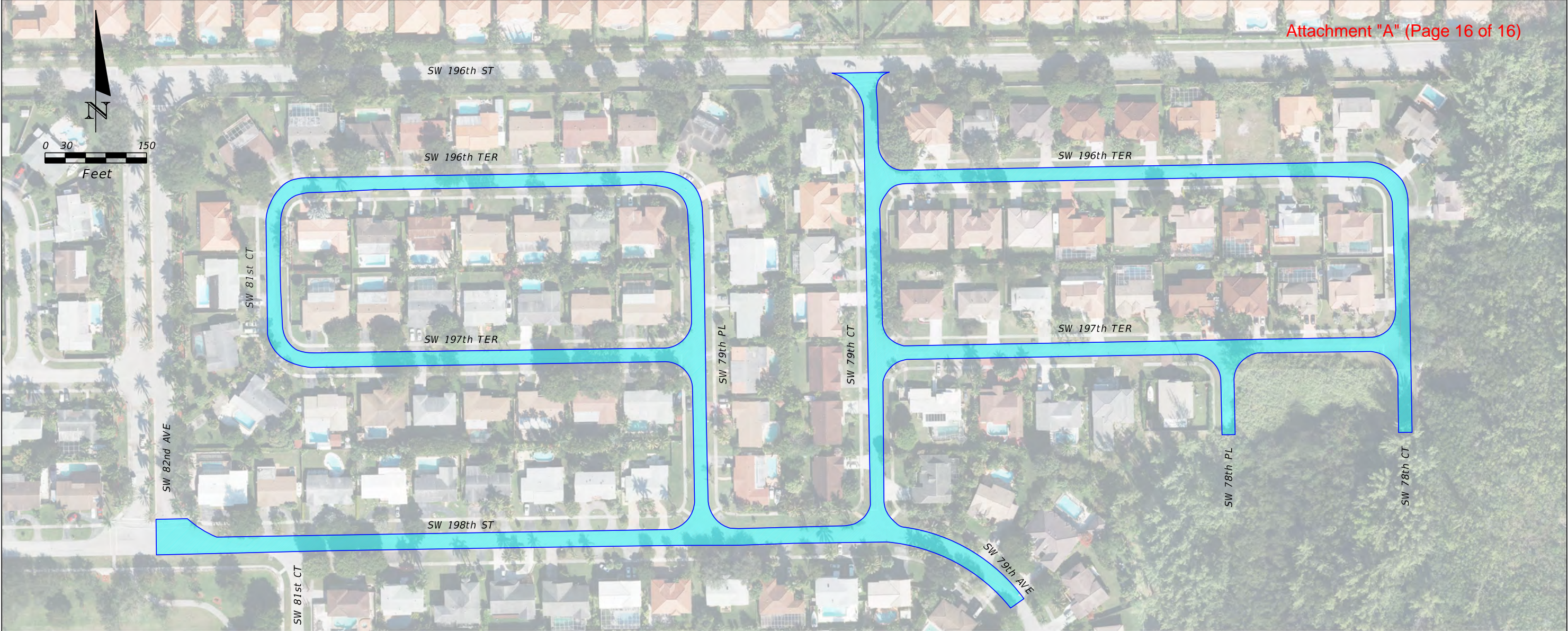
\* NPDES – NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM  
BMP – Best Management Practice.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) CHECKLIST

- A. SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS:
1. CLEARING & GRUBBING
  2. INSTALL DRAINAGE STRUCTURES
  3. STABILIZATION
  4. BASE PREPARATION
  5. ASPHALT APPLICATION
  6. PLACEMENT OF ROCK BAGS AROUND INLETS
  7. PLACEMENT OF ROCK BAGS AROUND MANHOLES
  8. APPLICATION OF FRICTION COURSE A.C.
  9. PAVEMENT MARKING
  10. REMOVE ROCK BAGS
  11. CLEAN ALL CONSTRUCTION DEBRIS FROM CONSTRUCTION SITE
- B. GENERAL
1. APPROVED STATE, LOCAL PLANS OR STORM WATER PERMITS.
  2. ALL OF THE CONTROLS SHALL BE MAINTAINED AT ALL TIMES.
  3. ALL CONTROLS SHALL BE INSPECTED DAILY.
  4. APPLY FERTILIZERS AND PESTICIDES ACCORDING TO STANDARD SPECIFICATIONS, DESIGN AND SPECIAL PROVISIONS.
  5. REPORT NON-STORM WATER DISCHARGE (INCLUDING SPILL)
  6. VISIT [www.dep.state.fl.us/water/stormwater/npdes/](http://www.dep.state.fl.us/water/stormwater/npdes/)

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DATE	DESCRIPTION					
						15






NOTES:

1. AT MATCH POINTS TO EXISTING ASPHALT TO REMAIN, CONTRACTOR SHALL MILL A MINIMUM 5' WIDE STRIP TO MATCH NEW PAVEMENT ELEVATION WITH EXISTING ELEVATION.
2. CONTRACTOR SHALL PLACE TEMPORARY STRIPING THE SAME DAY PAVING IS COMPLETED. PAVEMENT MARKINGS SHALL BE PLACED NO EARLIER THAN 30 DAYS AFTER ASPHALT OVERLAY COMPLETION.
3. ALL VALVES AND MANHOLES WITHIN PROJECT LIMITS SHALL BE RAISED BY CONTRACTOR.
4. CONTRACTOR SHALL OVERLAY EXISTING ASPHALT APRONS WITH 1" ASPHALT SLOPING TOWARDS CATCH BASIN AND FEATHERING TO FRAME (APRONS AVERAGE 7 SY EACH).
5. CONTRACTOR SHALL MILL A 3' STRIP AT ALL DRIVEWAYS IN ORDER FOR ALL NEW PAVEMENT TO MATCH FLUSH WITH ALL DRIVEWAYS.
6. CONTRACTOR SHALL MILL AND PROVIDE ASPHALT LEVELING COURSE AT LOCATIONS AS DIRECTED BY TOWN AND/OR ENGINEER.
7. ALL BARRICADES AND EQUIPMENT SHALL BE MAINTAINED FREE OF GRAFFITI AT ALL TIMES.

8. CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PROTECT ALL EXISTING PAVERS AND CONCRETE WITHIN AND ADJACENT TO PROJECT LIMITS. ANY DAMAGE OR TRACKING OF ASPHALT AND TACK IS CONTRACTOR'S RESPONSIBILITY TO REMOVE OR REPLACE TO THE SATISFACTION OF ENGINEER AND TOWN, AT NO ADDITIONAL COST TO THE TOWN.
9. CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PROTECT ALL EXISTING DRIVEWAYS, MAILBOXES, LANDSCAPING, ETC. WITHIN AND ADJACENT TO PROJECT LIMITS. ANY DAMAGE OR TRACKING OF ASPHALT AND TACK IS CONTRACTOR'S RESPONSIBILITY TO REMOVE OR REPLACE TO THE SATISFACTION OF ENGINEER AND TOWN, AT NO ADDITIONAL COST TO THE TOWN.
10. CONTRACTOR SHALL REMOVE ALL MILLING AND ASPHALT DEBRIS THE SAME DAY THE DEBRIS IS CREATED. ANY DEBRIS LEFT OVERNIGHT MAY BE REMOVED BY THE TOWN AT CONTRACTOR'S EXPENSE.
11. CONTRACTOR SHALL ACHIEVE A STRAIGHT EDGE OF PAVEMENT AT ALL PROPERTIES.
12. STAGING AREA WILL BE IDENTIFIED BY TOWN AND/OR ENGINEER.

- LEGEND:**
-  MILLING AND RESURFACING (MATCH EXISTING CROSS SLOPE)
  - MILLING**  
MILL EXISTING ASPHALT PAVEMENT (1" AVG. DEPTH)
  - RESURFACING**  
RESURFACE WITH TYPE S-1 ASPHALTIC CONCRETE (1" AVG.)

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DATE	DESCRIPTION					
						16