City of Tampa
Jane Castor, Mayor

Contract Administration
Michael W. Chucran, Director
306 East Jackson Street, 4N
Tampa, FL 33602

Office (813) 274-8116
Fax: (813) 274-7368

ADDENDUM 2
Via E-Mail
DATE: July 17, 2020

Contract 19-C-00046; 46th Street from SR 580 (Busch Blvd) to SR 582 (Fowler Ave) Bike Lane/Sidewalk

Bidders on the above referenced project are hereby notified that the following addendum is made to the Contract Documents. BIDS TO BE SUBMITTED SHALL CONFORM TO THIS NOTICE.

Item 1: Instructions to Bidders, page I-1b. I-1.05, second paragraph: Change "0" to be "460".

Item 2: Replace Proposal pages P-2 through P-7 with the attached pages P-2R through P-7R.

Item 3: Replace Plans-Roadway, Plans-Signage, Plans-Signalization and Plans-Landscape with the attached Construction Plans March 2020.

Item 4: Replace plans Cover sheet and sheet nos. 2A, 3 and SQ-1 with the attached plans sheet nos. 1, 2A, 3 and SQ-1.

Item 5: Replace pages SP-1 to SP-21 with the attached SP-1 to SP-21

Item 6: Replace the bid document cover and the Specifications Package cover with the attached bid document cover and the Specifications Package cover dated July 10, 2020.

Item 7: Attached are RFIs 1 through 16.

All other provisions of the Contract Documents and Specifications not in conflict with this Addendum shall remain in full force and effect.. Questions are to be e-mailed to Contract Administration@tampagov.net.

Jim Greiner

Jim Greiner, P.E., Contract Management Supervisor

WALK-BIKE LAP PROJECT-46TH ST FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)
FPID 437246-1-58-01/City Contract No. 19-C-00046 City of Tampa - Hillsborough County

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
0101 1	MOBILIZATION	LS	One Hundred Eighty Six Thousand Eight Hundred and Fifty Six Dollars	$186,856.00	
0102 1	MAINTENANCE OF TRAFFIC	LS	One Hundred Seventy Three Thousand and Fifteen Dollars	$173,015.00	
0999 25	INITIAL CONTINGENCY	LS	Fifty Thousand Dollars	$50,000.00	
425.1	CITY OF TAMPA TYPE 1 CURB INLET	EA	3	$	$
425.2	CITY OF TAMPA TYPE 2 CURB INLET	EA	1	$	$
425.3	CITY OF TAMPA TYPE 3 CURB INLET	EA	1	$	$
425.4	CITY OF TAMPA TYPE E DITCH BOTTOM INLET	EA	1	$	$
425.5	CITY OF TAMPA TYPE H DITCH BOTTOM INLET	EA	1	$	$
425.6	CITY OF TAMPA TYPE T DITCH BOTTOM INLET	EA	15	$	$
0102104	TEMPORARY SIGNALIZATION AND MAINTENANCE, INTERSECTION	ED	920	$	$
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION	ED	920	$	$
0104 10 3	SEDIMENT BARRIER	LF	5530	$	$
0104 18	INLET PROTECTION SYSTEM	EA	53	$	$
0107 1	LITTER REMOVAL	AC	100.509	$	$
0107 2	MOWING	AC	100.509	$	$
0110 1 1	CLEARING & GRUBBING	AC	3.178	$	$
0110 4 10	REMOVAL OF EXISTING CONCRETE	SY	2987	$	$
0110 7 1	MAILBOX, F&I SINGLE	EA	11	$	$
0120 1	REGULAR EXCAVATION	CY	55	$	$
0160 4	TYPE B STABILIZATION	SY	5078	$	$
0285709	OPTIONAL BASE, BASE GROUP 09	SY	1662	$	$
0327 70 6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	SY	22301	$	$
0327 70 10	MILLING EXIST ASPH PAVT, 5" AVG DEPTH	SY	38	$	$
0334 1 53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22	TN	144.2	$	$
0337 7 83	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC C, FC-12.5, PG 76-22	TN	1980.6	$	$

WALK-BIKE LAP PROJECT-46TH ST FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)
FPID 437246-1-58-01/City Contract No. 19-C-00046 City of Tampa - Hillsborough County

0350 3 7	PLAIN CEMENT CONCRETE PAVEMENT, 9"	SY	110	$	$
0425 2 6 1	MANHOLES, P-8, <10'	EA	2	$	$
0425 5 1	MANHOLE, ADJUST, UTILITIES	EA	15	$	$
0425 6	VALVE BOXES, ADJUST	EA	49	$	$
0430175112	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 12"S/CD	LF	4	$	$
0430175115	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 15"S/CD	LF	12	$	$
0430175118	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	301	$	$
0430175124	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD	LF	116	$	$
0430175218	PIPE CULVERT,OPTIONAL MATERIAL,OTHER-ELIP/ARCH, 18"S/CD	LF	179	$	$
0430175230	PIPE CULVERT, OPT MATERIAL, OTHER SHAPE - ELIP/ARCH, 30"S/CD	LF	4	$	$
0430984129	MITERED END SECTION, OPTIONAL ROUND, 24" SD	EA	1	$	$
0515 1 2	PIPE HANDRAIL - GUIDERAIL, ALUMINUM	LF	35	$	$
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	2210	$	$
0520 2 4	CONCRETE CURB, TYPE D	LF	380	$	$
0520 2 8	CONCRETE CURB, TYPE RA	LF	116	$	$
0520 70	CONCRETE TRAFFIC SEPARATOR, SPECIAL- VARIABLE WIDTH	SY	51	$	$
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	1439	$	$
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	6311	$	$
0523 1	PATTERNED PAVEMENT, VEHICULAR AREAS	SY	136	$	$
0524 1 2	CONCRETE DITCH PAVEMENT, NON REINFORCED, 4"	SY	71	$	$
0527 2	DETECTABLE WARNINGS	SF	632	$	$
0528 1	DIRECTIONAL INDICATOR	SF	96	$	$
0536 73	GUARDRAIL REMOVAL	LF	150	$	$
0550 10248	FENCING, TYPE B, 7.1-8.0, RESET EXISTING	LF	468	$	$
0570 1 2	PERFORMANCE TURF, SOD	SY	7013	$	$
				SUBTOTAL A	**$**

WALK-BIKE LAP PROJECT-46TH ST FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)
FPID 437246-1-58-01/City Contract No. 19-C-00046 City of Tampa - Hillsborough County

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
0700 1 11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	42	$	$
0700 1 12	SINGLE POST SIGN, F&I GROUND MOUNT, 12-20 SF	AS	1	$	$
0700 1 50	SINGLE POST SIGN, RELOCATE	AS	2	$	$
0700 1 60	SINGLE POST SIGN, REMOVE	AS	8	$	$
0700 3401	SIGN PANEL, INSTALL, UP TO 12 SF	EA	6	$	$
0700 3601	SIGN PANEL, REMOVE, UP TO 12 SF	EA	6	$	$
0710 90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	LS	1	$	$
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	613	$	$
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	910	$	$
0711 11141	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE/ 6-10 GAP EXTENSION, 6"	GM	0.037	$	$
0711 11143	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE, 12" FOR ROUNDABOUT	GM	0.026	$	$
0711 11160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	EA	4	$	$
0711 11170	THERMOPLASTIC, STANDARD, WHITE, ARROW	EA	5	$	$
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONAL OR CHEVRON	LF	174	$	$
0711 14123	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 12" FOR CROSSWALK	LF	275	$	$
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	LF	217	$	$
0711 14160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE	EA	61	$	$
0711 16101	THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6"	GM	2.825	$	$
0711 16201	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6"	GM	2.774	$	$
300-Signing & Pavement Markings				**SUBTOTAL B**	**$**

WALK-BIKE LAP PROJECT-46TH ST FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)
FPID 437246-1-58-01/City Contract No. 19-C-00046 City of Tampa - Hillsborough County

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
0630 2 11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	60	$	$
0630 2 12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	230	$	$
0632 7 1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1	$	$
0632 7 6	SIGNAL CABLE, REMOVE- INTERSECTION	PI	1	$	$
0635 2 12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	EA	14	$	$
0646 1 11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	3	$	$
0653 1 11	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 1 WAY	AS	4	$	$
0653 1 60	PEDESTRIAN SIGNAL, REMOVE PED SIGNAL- POLE/PEDESTAL TO REMAIN	AS	2	$	$
0654 2 22	RECTANGULAR RAPID FLASHING BEACON, FURNISH & INSTALL- SOLAR POWERED, COMPLETE SIGN ASSEMBLY- BACK TO BACK	AS	10	$	$
0660 2101	LOOP ASSEMBLY- F&I, TYPE A	AS	4	$	$
0660 2106	LOOP ASSEMBLY, F&I, TYPE F	AS	4	$	$
0665 1 12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	EA	4	$	$
0665 1 60	PEDESTRIAN DETECTOR, REMOVE- POLE/PEDESTAL TO REMAIN	EA	2	$	$
0670 5110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	AS	1	$	$
0670 5600	TRAFFIC CONTROLLER ASSEMBLY, REMOVE CONTROLLER WITH CABINET	AS	1	$	$
0700 5 22	INTERNALLY ILLUMINATED SIGN, FURNISH & INSTALL, OVERHEAD MOUNT, 12-18 SF	EA	4	$	$
500-Signalization				**SUBTOTAL C**	**$**

WALK-BIKE LAP PROJECT-46TH ST FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)
FPID 437246-1-58-01/City Contract No. 19-C-00046 City of Tampa - Hillsborough County

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
25.01	CONNECTION TO TECO ENERGY POWER METER	EA	1	$	$
25.02	TREE BUBBLERS 1 GPM - RAINBIRD 1402	EA	114	$	$
25.03	3/4" PVC FLEX PIPE	LF	250	$	$
25.04	3/4" PVC SCH 40 PIPE	LF	235	$	$
25.05	1" PVC SCH 40 PIPE	LF	235	$	$
25.06	1-1/2" PVC SCH 40 PIPE	LF	630	$	$
25.07	2" PVC SCH 40 PIPE	LF	500	$	$
25.08	2-1/2" PVC SCH 40 PIPE - MAIN	LF	1100	$	$
25.09	DRIP IRRIGATION-K-FLEX TUBING	SF	820	$	$
25.10	LOCATOR TAPE ALONG MAIN	LF	1100	$	$
25.11	2" BALL VALVE	EA	1	$	$
25.12	1" BACKFLOW PREVENTOR	EA	1	$	$
25.13	6" PVC SLEEVE WITH DIRECTIONAL BORE	L/F	410	$	$
25.14	CONCRETE VALVE BOX WITH CONC LID	EA	6	$	$
25.20	MIR/irrinet CONTROLLER	EA	1	$	$
25.21	IRRITROL 200b ELECTRIC CONTROL VALVE 1" SAM - NO PRS	EA	4	$	$
25.22	MASTER METER, INC. FLOW METER- 1-1/2"-MULTI-JET WITH ELEC. OUTPUT REGISTER (10gpm rate)	EA	1	$	$
25.23	IRRITROL MASTER CONTROL VALVE 216B, WITH DC LATCHING SOLENOID	EA	1	$	$
25.24	14-2 MAXICOM SOLID SHIELDED WIRE TO CONTROLLER	LF	35	$	$
25.25	KING WIRE NUTS	EA	37	$	$
25.26	RAINBIRD QUICK COUPLER RC-3	EA	2	$	$
25.27	PRESSURE REGULATOR - 3/4"	EA	2	$	$
25.28	DISK FILTER - 1" DF-100	EA	2	$	$
25.29	LINE FLUSHING VALVE 3/4"	EA	3	$	$
25.30	AIR/VACUUM RELIEF VALVE 3/4"	EA	3	$	$
25.4	BID ALLOWANCE FOR CONTRACTOR TO INSTALL 1-1/2" WATER METER	EA	1	$	$
580-2.1.1	SABAL PALM - 'Enhanced Root' 16'-24' CT STAGGARED HEIGTHS	EA	20	$	$
580-2.1.1	CREPE MYRTLE 'RED ROCKET' 4" caliper standard 65 gallon or B+B	EA	37	$	$
580-2.1.1	SIMPSON STOPPER	EA	52	$	$
580-2.4	PINE BARK MULCH	CY	4.4	$	$
580-2.5	PREPARED PLANTING SOILS	CY	8.8	$	$
600-Landscape & Peripherals				**SUBTOTAL D**	**$**

WALK-BIKE LAP PROJECT-46TH ST FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)
FPID 437246-1-58-01/City Contract No. 19-C-00046 City of Tampa - Hillsborough County

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
1050 51202	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 2"	LF	15	$	$
1050 51204	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 4"	LF	73	$	$
1050 51208	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 8"	LF	976	$	$
1050 51212	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 12"	LF	41	$	$
1050 61116	UTILITY PIPE- STEEL, FURNISH & INSTALL, CASING, 16"	LF	20	$	$
1055 51108	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL ELBOW, 8"	EA	10	$	$
1055 51112	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL ELBOW, 12"	EA	4	$	$
1055 51208	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL TEE, 8"	EA	6	$	$
1055 51308	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL REDUCER, 8"	EA	1	$	$
1055 51408	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL UNION, 8"	EA	1	$	$
1080 24106	UTILITY FIXTURE, VALVE ASSEMBLY, FURNISH AND INSTALL, 6"	EA	1	$	$
1080 24108	UTILITY FIXTURE, VALVE ASSEMBLY, FURNISH AND INSTALL, 8"	EA	11	$	$
1080 27106	UTILITY FIXTURE- LINE STOP ASSEMBLY, FURNISH AND INSTALL, 6"	EA	1	$	$
1080 27108	UTILITY FIXTURE- LINE STOP ASSEMBLY, FURNISH AND INSTALL, 8"	EA	7	$	$
1080 29106	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 6"	EA	4	$	$
1080 29108	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 8"	EA	49	$	$
1080 29112	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 12"	EA	2	$	$
1080 32106	UTILITY FIXTURE- SAMPLE POINT, FURNISH & INSTALL, 6"	EA	1	$	$
1080 32108	UTILITY FIXTURE- SAMPLE POINT, FURNISH & INSTALL, 8"	EA	6	$	$
1644113 08	FIRE HYDRANT, F&I, STANDARD, 2 HOSE, 1PUMPER, 6"	EA	3	$	$
1644900	FIRE HYDRANT, REMOVE	EA	3	$	$
700-Utilities				**SUBTOTAL E**	**$**
				TOTAL A+B+C+D+E	**$**

CONTRACT PLANS COMPONENTS

ROADWAY PLANS
SIGNING AND PAVEMENT MARKING PLANS
SIGNALIZATION PLANS
LANDSCAPE ARCHITECTURE PLANS
UTILITY WORK BY HIGHWAY CONTRACTOR AGREEMENT PLANS

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SIGNATURE SHEET
3	SUMMARY OF PAY ITEMS
4 - 6	TYPICAL SECTIONS
7 - 8	TYPICAL SECTION DETAILS
9	SUMMARY OF DRAINAGE STRUCTURES
10	PROJECT CONTROL
11	GENERAL NOTES
12 - 26	ROADWAY PLANS
27 - 28	SPECIAL PROFILES
29 - 30	INTERSECTION LAYOUT
31	INTERSECTION DETAIL
32 - 42	DRAINAGE STRUCTURES
43 - 55	CROSS SECTIONS
56 - 71	DRIVEWAY HALF-SECTIONS
72 - 75	TEMPORARY TRAFFIC CONTROL PLANS
76 - 90	UTILITY ADJUSTMENTS
SQ-1 - SQ-24	SUMMARY OF QUANTITIES

STATE OF FLORIDA

CITY OF TAMPA

WALK-BIKE LAP PROJECT

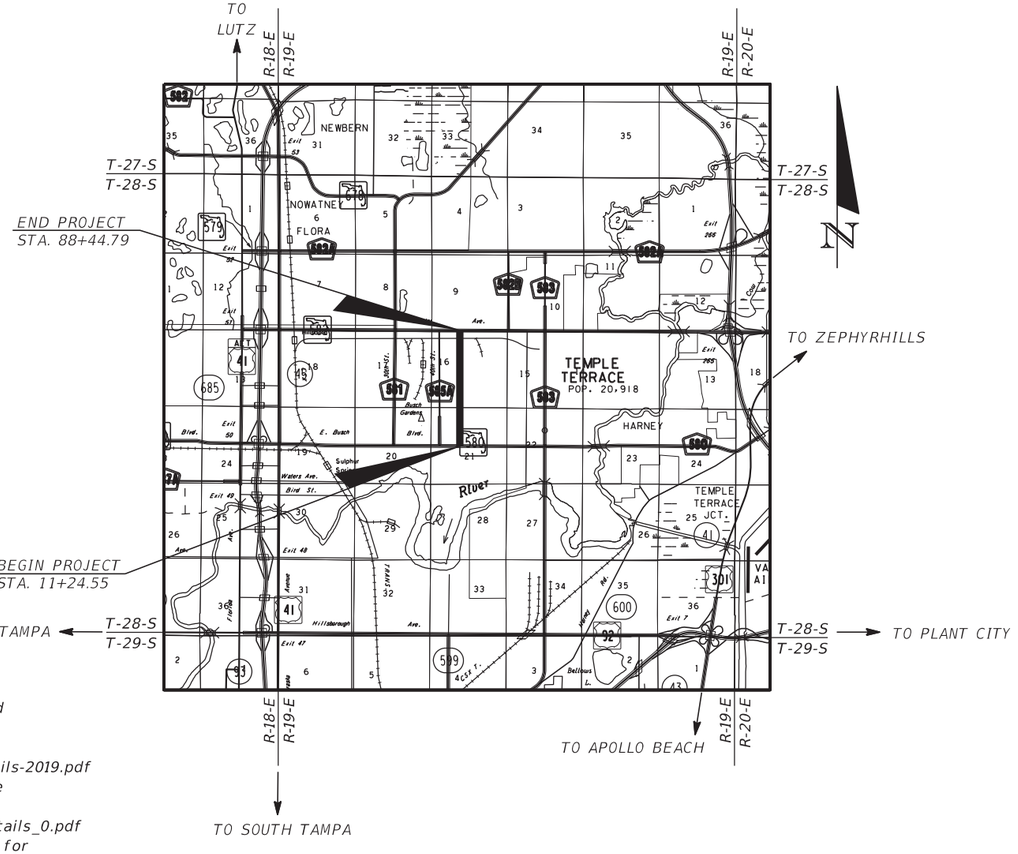
FINANCIAL PROJECT ID 437246-1-58-01

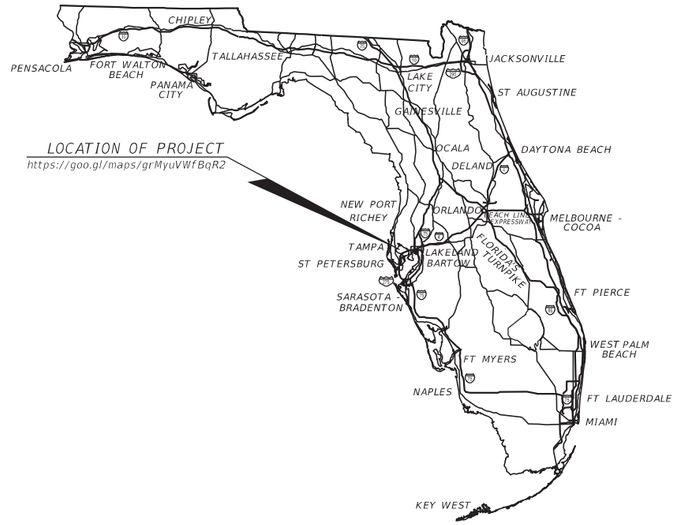
(FEDERAL FUNDS)

CITY PROJECT NO. 1001220

HILLSBOROUGH COUNTY

46TH STREET FROM SR 580 (BUSCH BLVD) TO SR 582 (FOWLER AVE)





CONSTRUCTION PLANS
MARCH 2020

ROADWAY PLANS ENGINEER OF RECORD:

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
(813) 978-8688
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA PROJECT MANAGER:

NINA MABILLEAU, E.I.

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2019-20 Standard Plans for Road and Bridge Construction, applicable Interim Revisions (IRs), and City of Tampa Stormwater Standards: Which can be found at the following web site:
https://www.tampagov.net/sites/default/files/stormwater/files/sw-standard-details-2019.pdf
For the City of Tampa Water Department Engineering Standard Details can be found at the following web site:
https://www.tampagov.net/sites/default/files/water/files/technical_standard_details_0.pdf
For the CIty of Tampa Wastewater Department Technical Standards Guideline for Construction of Wastewater Facilities, go to the web page site:
https://www.tampagov.net/sites/default/files/wastewater/files/TECHNICAL_STANDARDS_GUIDELINE_FOR_CONSTRUCTION_OF_WASTEWATER_FACILITIES_JULY_2014_VERSION_6.PDF

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, January 2020 Standard Specifications for Road and Bridge Construction at the following website:
http://www.fdot.gov/programmanagement/Implemented/SpecBooks

FISCAL YEAR	SHEET NO.
21	1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

JEFFREY SIEWERT
LICENSE
No 39196
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Jeffrey J Siewert
2020.04.27 11:28:32 -04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

AYRES ASSOCIATES INC
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION: 4356
JEFFREY SIEWERT, P.E. NO. 39196

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SIGNATURE SHEET
3	SUMMARY OF PAY ITEMS
4 - 6	TYPICAL SECTIONS
7 - 8	TYPICAL SECTION DETAILS
10	PROJECT CONTROL
11	GENERAL NOTES
12 - 26	ROADWAY PLANS
27 - 28	SPECIAL PROFILES
29 - 30	INTERSECTION LAYOUT
31	INTERSECTION DETAIL
43 - 55	CROSS SECTIONS
56 - 71	DRIVEWAY HALF-SECTIONS
72 - 75	TEMPORARY TRAFFIC CONTROL PLANS
76 - 90	UTILITY ADJUSTMENTS
SQ-1	SUMMARY OF QUANTITIES
SQ-3 - SQ-13	SUMMARY OF QUANTITIES
SQ-15 - SQ-24	SUMMARY OF QUANTITIES

THOMAS WARD
LICENSE
No 52144
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Thomas J Ward
2020.04.24 13:56:31 -04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BES INC.
1107 N 56TH ST, SUITE 209
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION: 9835
THOMAS WARD, P.E. NO. 52144

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.	SHEET DESCRIPTION
2	SIGNATURE SHEET
9	SUMMARY OF DRAINAGE STRUCTURES
32 - 42	DRAINAGE STRUCTURES
SQ-2	SUMMARY OF QUANTITIES
SQ-14	SUMMARY OF QUANTITIES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNATURE SHEET

SHEET NO. 2

CITY OF TAMPA
PROPOSAL SUMMARY OF PAY ITEMS
CIP NO.: 1001220 / FPID: 437246-1-58-01

SUMMARY OF ROADWAY

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
0101 1	MOBILIZATION	LS	1
0102 1	MAINTENANCE OF TRAFFIC	LS	1
0102104	TEMPORARY SIGNALIZATION AND MAINTENANCE, INTERSECTION	ED	920
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION	ED	920
0104 10 3	SEDIMENT BARRIER	LF	5530
0104 18	INLET PROETECTION SYSTEM	EA	53
0107 1	LITTER REMOVAL	AC	100.509
0107 2	MOWING	AC	100.509
0110 1 1	CLEARING & GRUBBING	AC	3.178
0110 4 10	REMOVAL OF EXISTING CONCRETE	SY	2987
0110 7 1	MAILBOX, F&I SINGLE	EA	11
0120 1	REGULAR EXCAVATION	CY	55
0160 4	TYPE B STABILIZATION	SY	5078
0285709	OPTIONAL BASE, BASE GROUP 09	SY	1662
0327 70 6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	SY	22301
0327 70 10	MILLING EXIST ASPH PAVT, 5" AVG DEPTH	SY	38
0334 1 53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22	TN	144.2
0337 7 83	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC C, FC-12.5, PG 76-22	TN	1980.6
0350 3 7	PLAIN CEMENT CONCRETE PAVEMENT, 9"	SY	110
0425 5 1	MANHOLE, ADJUST, UTILITIES	EA	15
0425 6	VALVE BOXES, ADJUST	EA	49
425.10	CITY OF TAMPA TYPE 1 CURB INLET	EA	3
425.20	CITY OF TAMPA TYPE 2 CURB INLET	EA	1
425.30	CITY OF TAMPA TYPE 3 CURB INLET	EA	1
425.40	CITY OF TAMPA TYPE E DITCH BOTTOM INLET	EA	1
425.50	CITY OF TAMPA TYPE H DITCH BOTTOM INLET	EA	1
425.60	CITY OF TAMPA TYPE T DITCH BOTTOM INLET	EA	15
0425 2 61	MANHOLES, P-8, <10'	EA	2
0430175112	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 12"S/CD	LF	4
0430175115	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 15"S/CD	LF	12
0430175118	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	301
0430175124	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD	LF	116
0430175218	PIPE CULVERT,OPTIONAL MATERIAL,OTHER-ELIP/ARCH, 18"S/CD	LF	179
0430175230	PIPE CULVERT, OPT MATERIAL, OTHER SHAPE - ELIP/ARCH, 30"S/CD	LF	4
0430984129	MITERED END SECTION, OPTIONAL ROUND, 24" SD	EA	1
0515 1 2	PIPE HANDRAIL - GUIDERAIL, ALUMINUM	LF	35
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	2210
0520 2 4	CONCRETE CURB, TYPE D	LF	380
0520 2 8	CONCRETE CURB, TYPE RA	LF	116
0520 70	CONCRETE TRAFFIC SEPARATOR, SPECIAL- VARIABLE WIDTH	SY	51
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	1439
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	6311
0523 1	PATTERNED PAVEMENT, VEHICULAR AREAS	SY	136
0524 1 2	CONCRETE DITCH PAVEMENT, NON REINFORCED, 4"	SY	71
0527 2	DETECTABLE WARNINGS	SF	632
0528 1	DIRECTIONAL INDICATOR	SY	96
0536 73	GUARDRAIL REMOVAL	LF	150
0550 10248	FENCING, TYPE B, 7.1-8.0, RESET EXISTING	LF	468
0570 1 2	PERFORMANCE TURF, SOD	SY	7013

SUMMARY OF SIGNING AND PAVEMENT MARKING

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
0700 1 11	SINGLE POST SIGN, F&I GROUNDMOUNT, UP TO 12 SF	AS	42
0700 1 12	SINGLE POST SIGN, F&I GROUNDMOUNT, 12-20 SF	AS	1
0700 1 50	SINGLE POST SIGN, RELOCATE	AS	2
0700 1 60	SINGLE POST SIGN, REMOVE	AS	8
0700 3401	SIGN PANEL, INSTALL, UP TO 12 SF	EA	6
0700 3601	SIGN PANEL, REMOVE, UP TO 12 SF	EA	6
0710 90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	LS	1
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	613
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	910
0711 11141	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE/ 6-10 GAP EXTENSION, 6"	GM	0.037
0711 11143	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE, 12" FOR ROUNDABOUT	GM	0.026
0711 11160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	EA	4
0711 11170	THERMOPLASTIC, STANDARD, WHITE, ARROW	EA	5
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONAL OR CHEVRON	LF	174
0711 14123	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 12" FOR CROSSWALK	EA	275
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	EA	217
0711 14160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE	EA	61
0711 16101	THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6"	GM	2.825
0711 16201	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6"	GM	2.774

SUMMARY OF SIGNALIZATION

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
630-2-11	CONDUIT, F&I, OPEN TRENCH	LF	60
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	LF	230
632-7-1	SIGNAL CABLE, NEW OR RECONSTRUCTED INTERSECTION, F&I	PI	1
632-7-6	SIGNAL CABLE, REMOVE - INTERSECTION	PI	1
635-2-12	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	EA	14
646-1-11	ALUMINUM SIGNAL POLE, PEDESTAL	EA	3
653-1-11	PEDESTRIAN SIGNAL, F&I, LED, COUNTDOWN, 1-WAY	AS	4
653-1-60	PEDESTRIAN SIGNAL, REMOVE PEDESTRIAN SIGNAL, POLE/PEDESTAL TO REMAIN	AS	2
654-2-22	RECTANGULAR RAPID FLASHING BEACON, F&I, SOLAR, COMPLETE SIGN ASSEMBLY, BACK TO BACK	AS	10
660-1-103	LOOP DETECTOR, INDUCTIVE, F&I, TYPE 3	EA	4
660-2-101	LOOP ASSEMBLY, F&I, TYPE A	AS	4
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	AS	4
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	EA	4
665-1-60	PEDESTRIAN DETECTOR, REMOVE - POLE/PEDESTAL TO REMAIN	EA	2
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	AS	1
670-5-600	TRAFFIC CONTROLLER ASSEMBLY, REMOVE CONTROLLER WITH CABINET	AS	1
700-5-22	INTERNALLY ILLUMINATED SIGN, F&I, OVERHEAD MOUNT, 12-18 SF	EA	4

SUMMARY OF LANDSCAPING

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
25.00	CONNECTION TO TECO ENERGY POWER METER	EA	1
25.01	TREE BUBBLERS 1 GPM - RAINBIRD 1402	EA	114
25.02	3/4" PVC FLEX PIPE	LF	250
25.03	3/4" PVC SCH 40 PIPE	LF	235
25.04	1" PVC SCH 40 PIPE	LF	235
25.05	1-1/2" PVC SCH 40 PIPE	LF	630
25.06	2" PVC SCH 40 PIPE	LF	500
25.07	2-1/2" PVC SCH 40 PIPE - MAIN	LF	1100
25.08	DRIP IRRIGATION-K-FLEX TUBING	SF	820
25.09	LOCATOR TAPE ALONG MAIN	LF	1100
25.10	2" BALL VALVE	EA	1
25.11	1" BACKFLOW PREVENTOR	EA	1
25.12	6" PVC SLEEVE WITH DIRECTIONAL BORE	L/F	410
25.13	CONCRETE VALVE BOX WITH CONC LID	EA	6
25.20	MIR/irrinet CONTROLLER	EA	1
25.21	IRRITROL 200b ELECTRIC CONTROL VALVE 1" SAM - NO PRS	EA	4
25.22	MASTER METER, INC. FLOW METER- 1-1/2"-MULTI-JET WITH ELEC. OUTPUT REGISTER (10gpm rate)	EA	1
25.23	IRRITROL MASTER CONTROL VALVE 216B, WITH DC LATCHING SOLENOID	EA	1
25.24	14-2 MAXICOM SOLID SHIELDED WIRE TO CONTROLLER	LF	35
25.25	KING WIRE NUTS	EA	37
25.26	RAINBIRD QUICK COUPLER RC-3	EA	2
25.27	PRESSURE REGULATOR - 3/4"	EA	2
25.28	DISK FILTER - 1" DF-100	EA	2
25.29	LINE FLUSHING VALVE 3/4"	EA	3
25.30	AIR/VACUUM RELIEF VALVE 3/4"	EA	3
25.40	BID ALLOWANCE FOR CONTRACTOR TO INSTALL 1-1/2" WATER METER	EA	1
580-2.1.1	SABAL PALM - 'Enhanced Root' 16'-24' CT STAGGARED HEIGTHS	EA	20
580-2.1.1	CREPE MYRTLE 'RED ROCKET' 4" caliper standard 65 gallon or B+B	EA	37
580-2.1.1	SIMPSON STOPPER	EA	52
580-2.4	PINE BARK MULCH	CY	4.4
580-2.5	PREPARED PLANTING SOILS	CY	8.8

SUMMARY OF UWHCA

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
1050 51202	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 2"	LF	15
1050 51206	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 6"	LF	73
1050 51208	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 8"	LF	976
1050 51212	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 12"	LF	41
1050 61116	UTILITY PIPE- STEEL, FURNISH & INSTALL, CASING, 16"	LF	20
1055 51108	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL ELBOW, 8"	EA	10
1055 51112	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL ELBOW, 12"	EA	4
1055 51208	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL TEE, 8"	EA	6
1055 51308	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL REDUCER, 8"	EA	1
1055 51408	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL UNION, 8"	EA	1
1080 24106	UTILITY FIXTURE, VALVE ASSEMBLY, FURNISH AND INSTALL, 6"	EA	1
1080 24108	UTILITY FIXTURE, VALVE ASSEMBLY, FURNISH AND INSTALL, 8"	EA	11
1080 27106	UTILITY FIXTURE- LINE STOP ASSEMBLY, FURNISH AND INSTALL, 6"	EA	1
1080 27108	UTILITY FIXTURE- LINE STOP ASSEMBLY, FURNISH AND INSTALL, 8"	EA	7
1080 29106	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 6"	EA	4
1080 29108	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 8"	EA	49
1080 29112	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 12"	EA	2
1080 32106	UTILITY FIXTURE- SAMPLE POINT, FURNISH & INSTALL, 6"	EA	1
1080 32108	UTILITY FIXTURE- SAMPLE POINT, FURNISH & INSTALL, 8"	EA	6
1644113 08	FIRE HYDRANT, F&I, STANDARD, 2 HOSE, 1PUMPER, 6"	EA	3
1644900	FIRE HYDRANT, REMOVE	EA	3

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

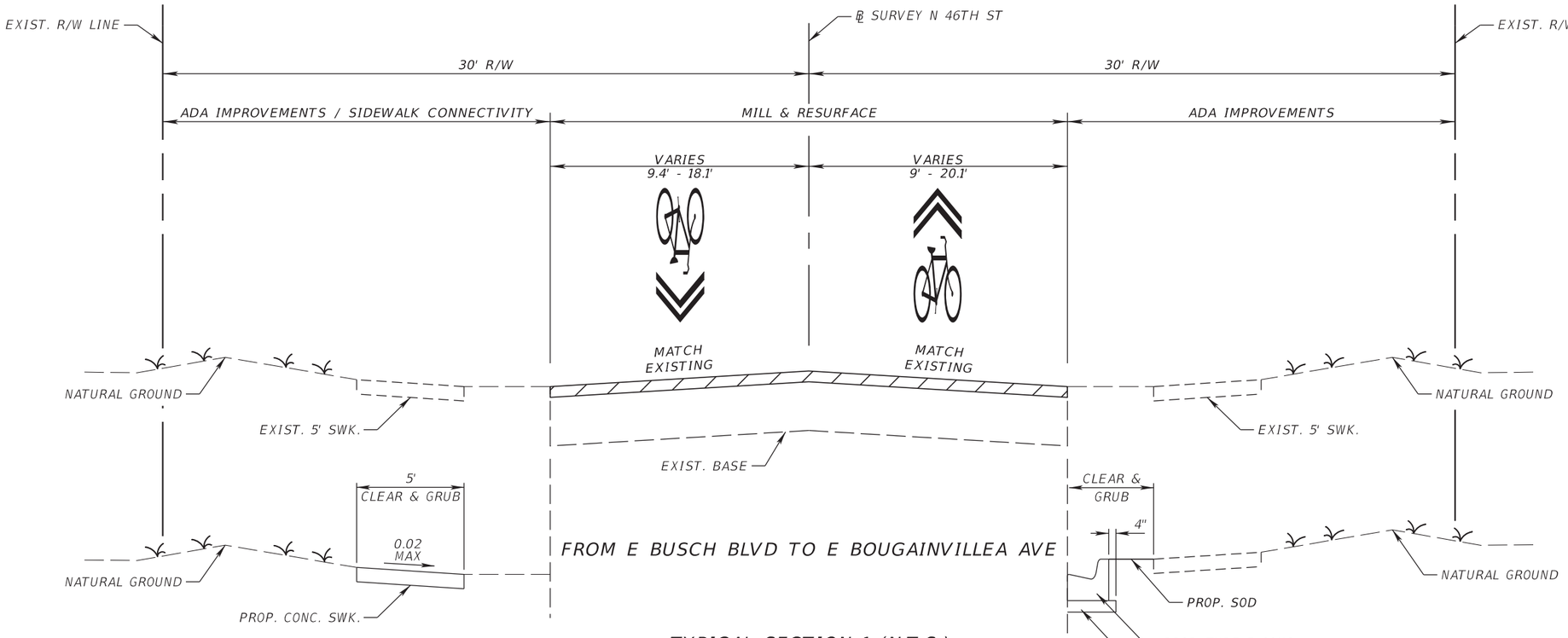
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF PAY ITEMS

SHEET NO. 3



STA. 15+50.92 TO STA. 23+09.58

TYPICAL SECTION 1 (N.T.S.)

N 46TH ST

STA. 11+24.55 TO STA. 35+15.20
STA. 37+65.21 TO STA. 50+00.00

STA. 23+46.85 TO STA. 31+66.00

MILLING

MILL EXISTING ASPHALT
PAVEMENT FOR DEPTH (1.5")

RESURFACING

FRICTION COURSE FC-12.5 (TRAFFIC C) (1.5")

WIDENING (SEE PLANS)

OPTIONAL BASE GROUP 09 WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1.5")
AND FRICTION COURSE FC-12.5 (1.5")

STA. 16+71.99 TO STA. 17+13.96
STA. 17+95.46 TO STA. 18+20.59
STA. 20+44.53 TO STA. 20+70.03
STA. 24+80.87 TO STA. 25+80.78
STA. 30+70.30 TO STA. 30+97.26
STA. 31+11.23 TO STA. 31+38.67
STA. 69+42.21 TO STA. 70+15.14

TRAFFIC DATA

CURRENT YEAR = 2021 AADT = 6,300
K = 9.0% D = 59.7% T = 5.7% (24 HOUR)
DESIGN HOUR T = 2.9%
DESIGN SPEED = 30 MPH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

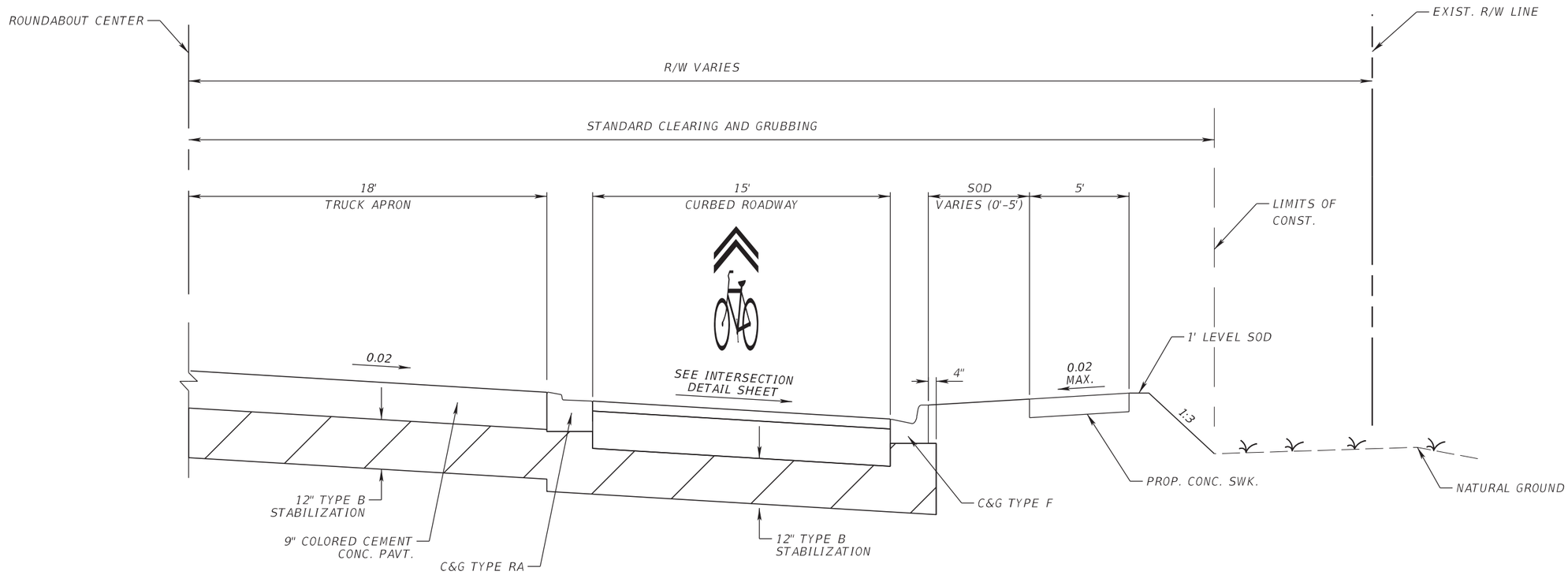
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TYPICAL SECTION (1)

SHEET NO. 4



INTERSECTION AT E LINEBAUGH AVE (MINI ROUNDABOUT)

TYPICAL SECTION 2 (N.T.S.)

N 46TH ST

STA. 35+15.20 TO STA. 37+65.21

NEW CONSTRUCTION (CIRCULATORY ROADWAY)

OPTIONAL BASE GROUP 09 WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1.5")
AND FRICTION COURSE FC-12.5 (TRAFFIC C) (1.5")

NEW CONSTRUCTION (TRUCK APRON)

COLORED CEMENT CONCRETE PAVEMENT (9")

TRAFFIC DATA

CURRENT YEAR = 2021 AADT = 6,300
K = 9.0% D = 59.7% T = 5.7% (24 HOUR)
DESIGN HOUR T = 2.9%
DESIGN SPEED = 30 MPH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

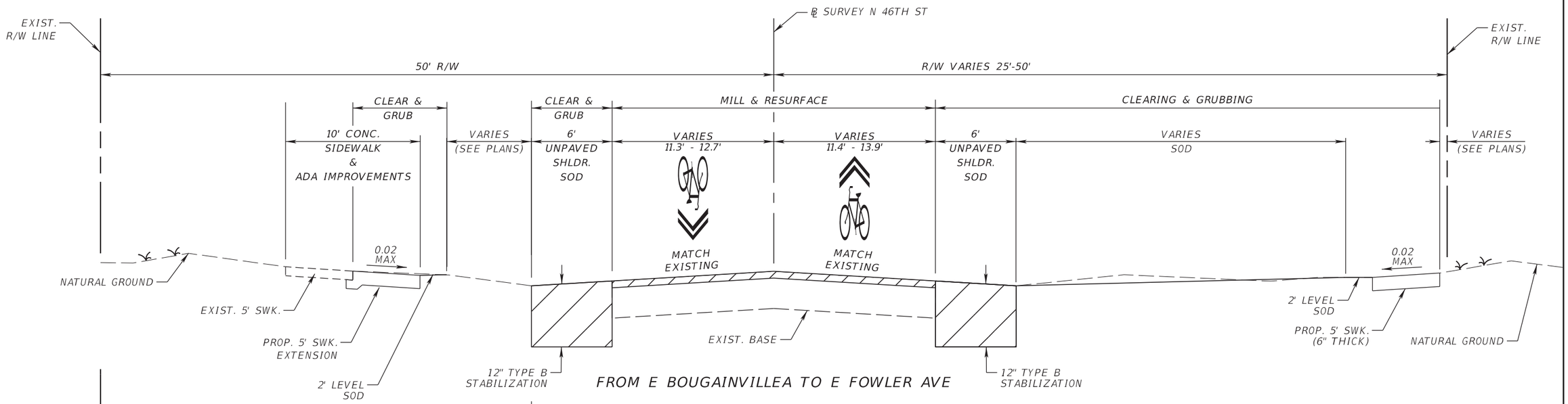
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

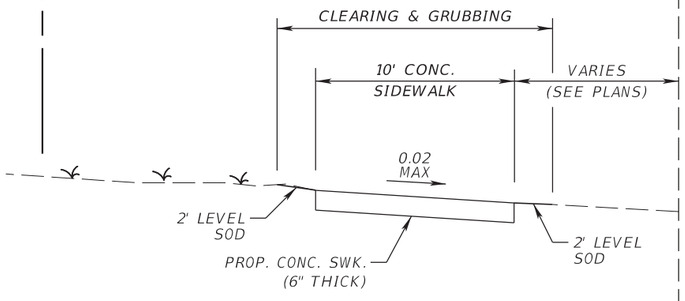
TYPICAL SECTION (2)

SHEET NO. 5



FROM E BOUGAINVILLEA TO E FOWLER AVE

STA. 50+22.10 TO STA. 63+21.33



STA. 63+62.13 TO STA. 87+99.33

TYPICAL SECTION 3 (N.T.S.)

N 46TH ST

STA. 50+00.00 TO STA. 88+44.79

MILLING

MILL EXISTING ASPHALT PAVEMENT FOR DEPTH (1.5")

RESURFACING

FRICTION COURSE FC-12.5 (TRAFFIC C) (1.5")

TRAFFIC DATA

CURRENT YEAR = 2021 AADT = 6,300
K = 9.0% D = 59.7% T = 5.7% (24 HOUR)
DESIGN HOUR T = 2.9%
DESIGN SPEED = 30 MPH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

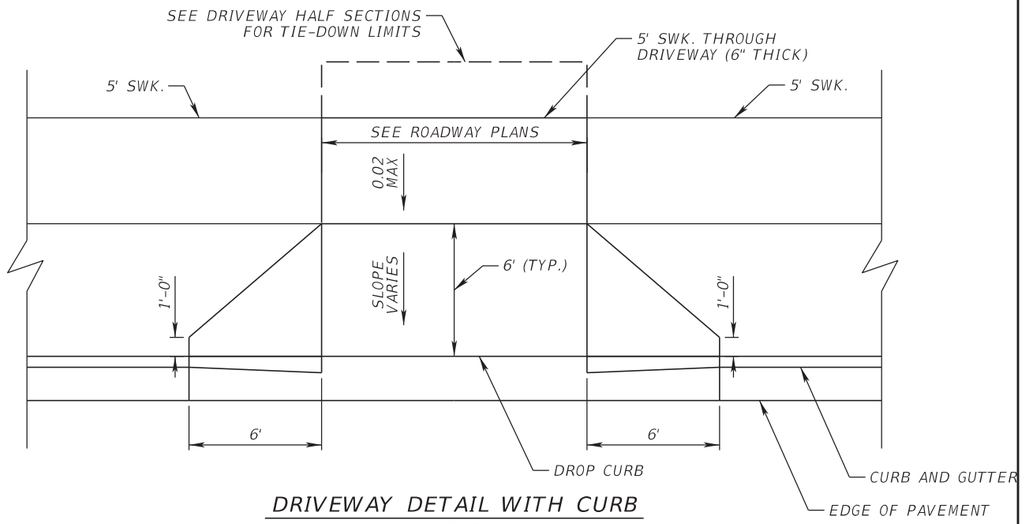
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

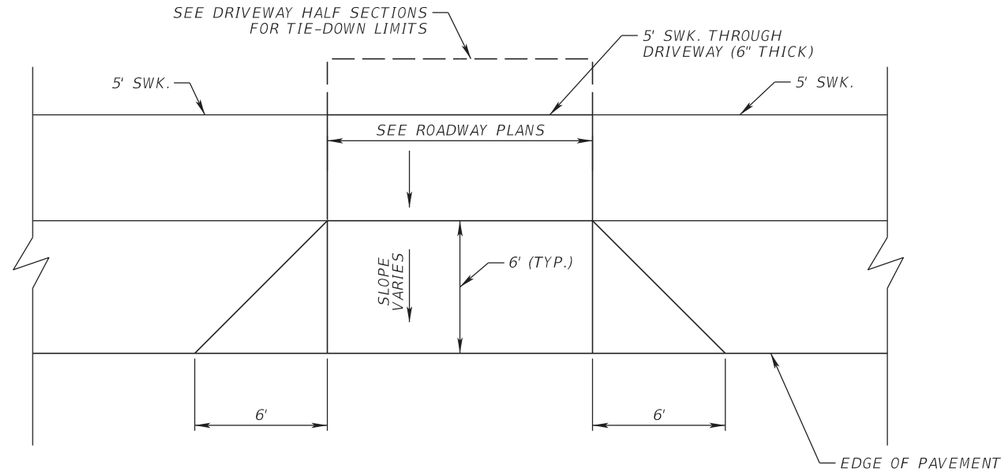
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TYPICAL SECTION (3)

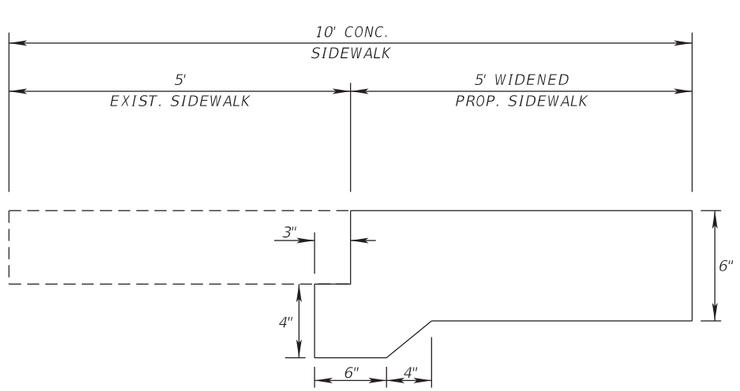
SHEET NO. 6



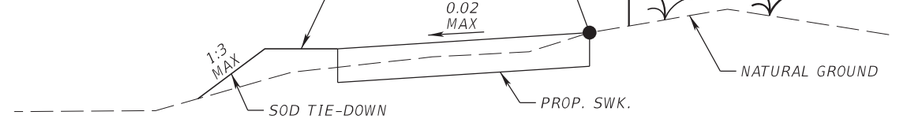
DRIVEWAY DETAIL WITH CURB
N.T.S.



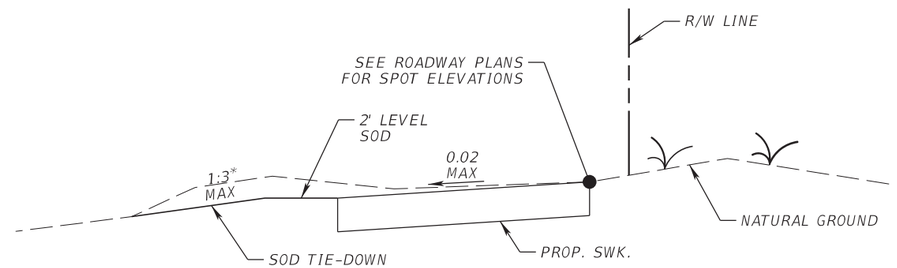
DRIVEWAY DETAIL NO CURB
N.T.S.



SIDEWALK EXTENSION DETAIL
N.T.S.



OPTION 1 - ABOVE GROUND



* TIE-DOWN SOD LIMITS VARY.
TIE-DOWN TO MAINTAIN ADVERSE DRAINAGE.

OPTION 2 - UNDERNEATH GROUND

SIDEWALK TIE-DOWN DETAIL
N.T.S.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

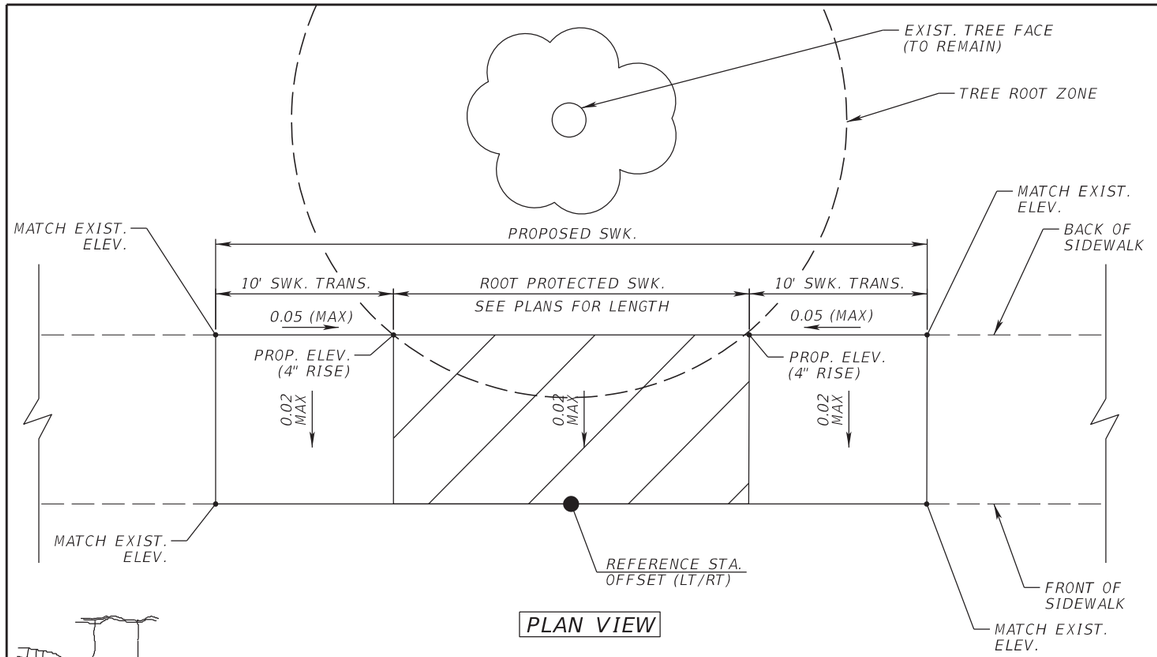
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

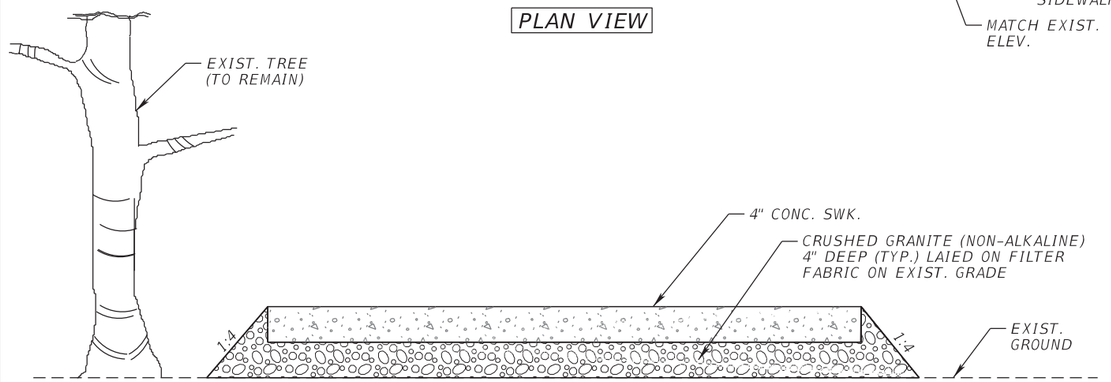
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TYPICAL SECTION DETAILS (1)

SHEET NO. 7



PLAN VIEW

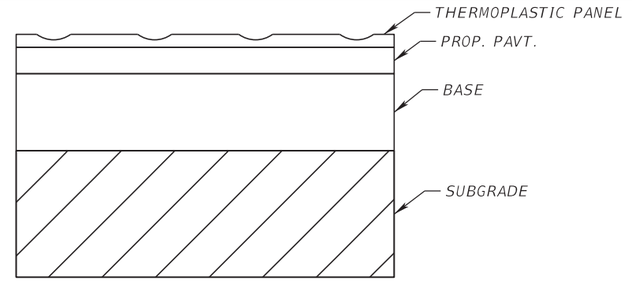


CROSS SECTIONAL VIEW

ROOT PROTECTED SIDEWALK DETAIL

N.T.S.

STA. 20+80.87 RT
STA. 21+25.06 RT
STA. 29+35.19 RT
STA. 30+44.71 RT
STA. 51+85.39 RT
STA. 52+39.04 RT
STA. 52+96.19 RT
STA. 55+28.48 RT
STA. 13+32.96 LT
STA. 48+23.69 LT



THERMOPLASTIC PAVEMENT OVERLAY FOR ASPHALT AND CONCRETE BRICK PATTERN

N.T.S.

STA. 36+40.22 LT/RT
℄ 46TH ST (TRUCK APRON)

STA. 105+50.00 LT/RT
℄ LINEBAUGH AVE (SPLITTER ISLAND)

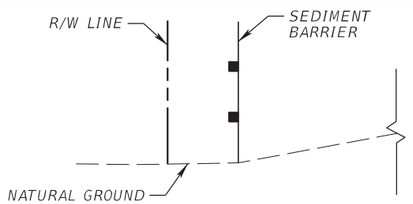
TREE REMOVAL / REPLACEMENT TABLE			
TREES RETAINED DIAMETER (INCHES)	# OF TREES	MULTIPLIER FOR	TOTAL CREDITS
5" TO 7"	37	0	0
8" TO 12"	0	1	0
13" TO 19"	0	2	0
20" TO 29"	0	4	0
30" OR MORE	0	10	0
ALL PALMS	20	1	20
TOTAL	57		20
TREES REMOVED DIAMETER (INCHES)	# OF TREES	MULTIPLIER FOR	TOTAL DEBITS
5" TO 7"	3	0	0
8" TO 12"	0	1	0
13" TO 19"	0	2	0
20" TO 29"	1*	4	0
30" OR MORE	0	10	0
ALL PALMS	3	1	3
TOTAL	6		3
% REMOVED	N/A		
* TREE DEEMED DANGEROUS DURING FIELD REVIEW AND N/A TO CREDIT TOTAL			

TREE REMOVAL TABLE

14+50.00 LT (20" TO 29")
50+37.08 RT (5" TO 7")
50+45.56 RT (5" TO 7")
56+22.60 RT (5" TO 7")
69+29.84 RT (PALM)
69+31.73 RT (PALM)
69+36.81 RT (PALM)

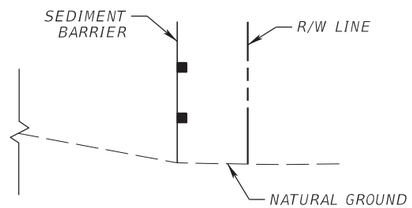
NOTE: SEE ROADWAY PLANS FOR EXACT LOCATION OF TREE REMOVALS.

SEE LANDSCAPE PLANS FOR EXACT LOCATION OF PROPOSED TREES.



STA. 12+50 TO STA. 16+30
STA. 18+30 TO STA. 23+60
STA. 36+40 TO STA. 37+00
STA. 54+80 TO STA. 74+50
STA. 77+00 TO STA. 78+60
STA. 80+00 TO STA. 83+20
STA. 87+40 TO STA. 88+40

SEDIMENT BARRIER (LT) LOCATIONS



STA. 14+60 TO STA. 25+20
STA. 75+50 TO STA. 85+00

SEDIMENT BARRIER (RT) LOCATIONS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TYPICAL SECTION DETAILS (2)

SHEET NO. 8

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN RCP MATERIAL						CURB INLETS			MANHOLES	DITCH BOTTOM INLETS			MITERED END SECTIONS (1:4)	4" CONC. DITCH PAVT.	REMARKS
						ROUND				OTHER		TYPE 1	TYPE 2	TYPE 3	STANDARD	E	H	T			
						12"	15"	18"	24"	12"x18"	19"x30"	<10'	<10'	<10'	<10'	<10'	<10'	<10'		SY	
P	S-1	15+27.33	RT.	INLET, PIPE	1	4												1		12.3	
F																					
P	S-2	16+19.68	RT.	INLET, PIPE	1		4											1		11.4	
F																					
P	S-3	17+67.76	LT.	PIPE, INLET, PIPE	1			4	4									1		0.8	
F																					
P	S-4	17+70.64	RT.	INLET, PIPE	1		4											1		5.4	
F																					
P	S-5	18+10.32	LT.	PIPE, INLET	1			4										1		1.7	
F																					
P	S-6	18+78.58	LT.	INLET, PIPE	1			68										1		0.5	
F																					
P	S-7	19+46.83	LT.	INLET, PIPE	1			68										1		0.5	
F																					
P	S-8	20+15.08	LT.	PIPE, INLET PIPE	1					8								1		4.7	
F																					
P	S-9	20+59.70	LT.	INLET, PIPE	1					4								1		4.9	
F																					
P	S-10	21+38.98	LT.	INLET, PIPE	1					76								1		0.9	
F																					
P	S-11	22+18.26	LT.	INLET, PIPE	1					79								1		0.9	
F																					
P	S-12	22+97.54	LT.	PIPE, INLET, PIPE	1					8								1		4.3	
F																					
P	S-13	23+40.43	RT.	INLET, PIPE	1						4							1		6.5	
F																					
P	S-14	23+46.18	LT.	INLET, PIPE	1					4								1		9.9	
F																					
P	S-15	35+86.00	LT.	INLET, PIPE	1				99			1									
F																					
P	S-16	35+86.00	RT.	INLET, PIPE	1			31					1								
F																					
F	S-17	104+50.47	LT.	INLET, PIPE, MH, PIPE, MES	1														1		B/L LINEBAUGH
P																					
P	S-18	36+88.17	LT.	PIPE, INLET, PIPE	1				13						1						
F																					
P	S-19	105+69.00	LT.	INLET, PIPE	1			35				1									B/L LINEBAUGH
F																					
P	S-20	36+64.14	RT.	INLET, PIPE	1			24							1						
F																					
P	S-21	36+88.17	RT.	INLET, PIPE	1			47				1									
F																					
P	S-22	42+77.83	RT.	INLET, PIPE	1			4										1		1.1	
F																					
P	S-23	43+16.79	LT.	INLET, PIPE	1		4									1				0.9	
F																					
P	S-24	47+49.44	LT.	PIPE, INLET, PIPE	1			8									1			4.3	
F																					
P	S-25	47+53.96	RT.	INLET, PIPE	1			8						1							
F																					
P																					
F																					
				Summary:		4	12	301	116	179	4	3	1	1	2	1	1	15	1	71	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

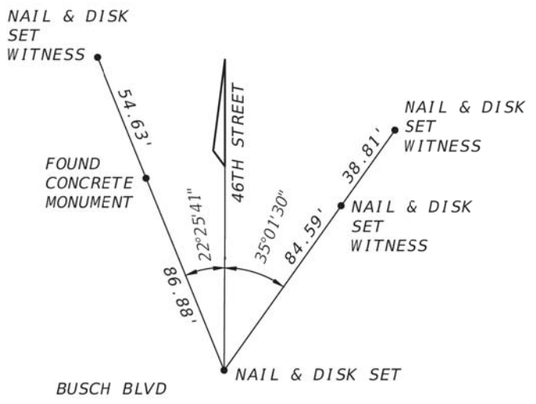
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

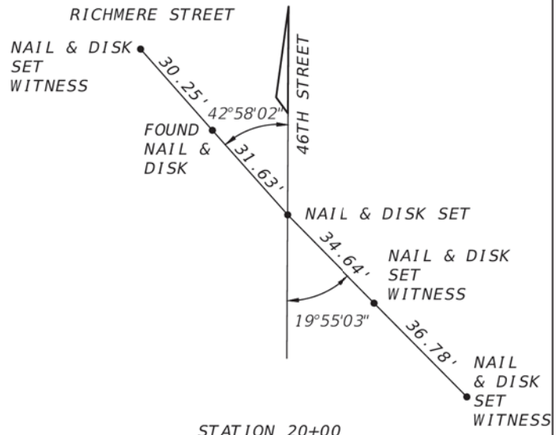
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

SUMMARY OF DRAINAGE STRUCTURES

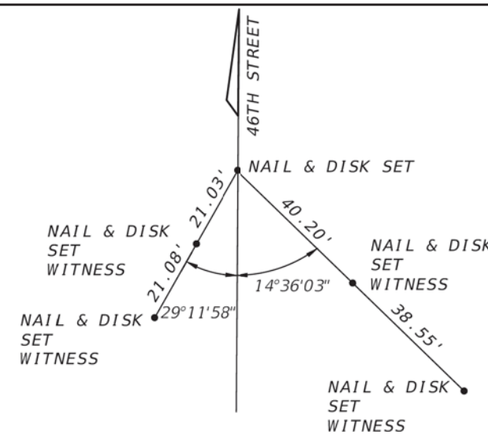
SHEET NO. 9



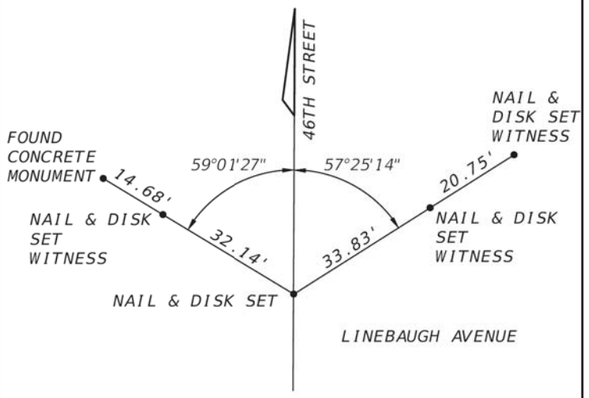
BEGIN STATION 10+00
SET NAIL & DISK #7203



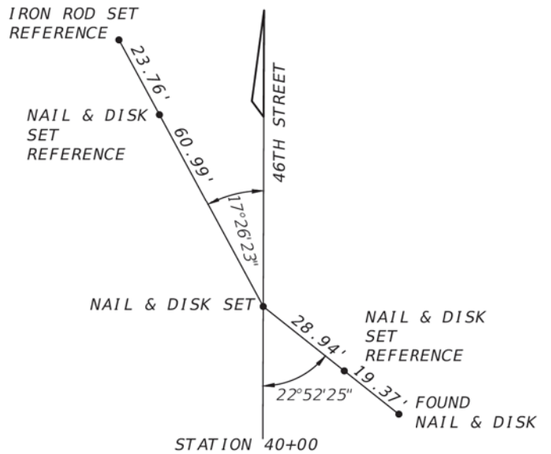
STATION 20+00
SET NAIL & DISK #7203



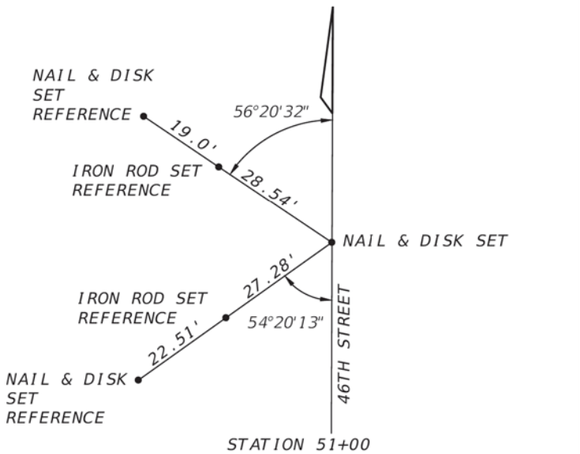
STATION 30+00
SET NAIL & DISK #7203



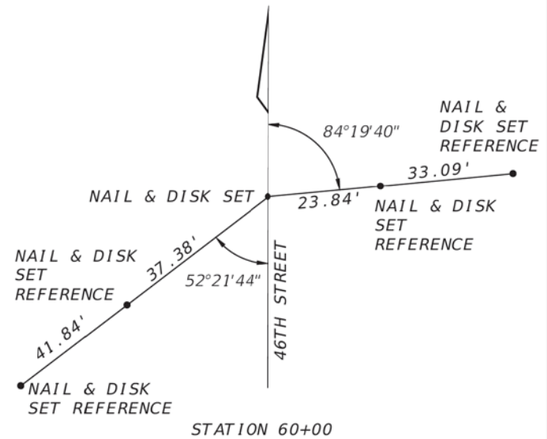
STATION 36+40.22
SET NAIL & DISK #7203



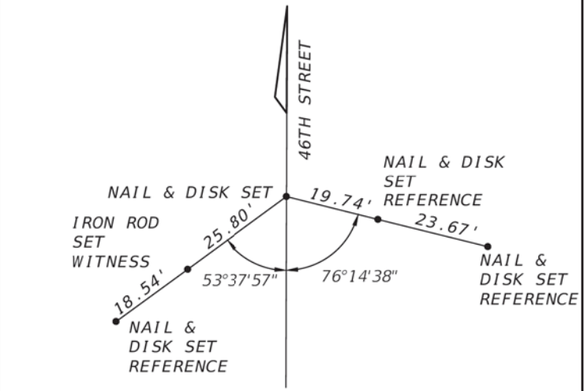
STATION 40+00
SET NAIL & DISK #7203



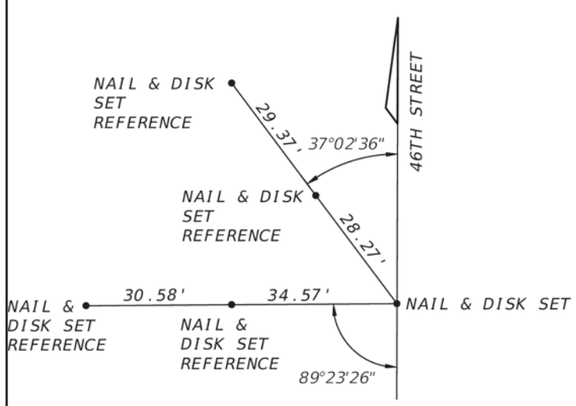
STATION 51+00
SET NAIL & DISK #7203



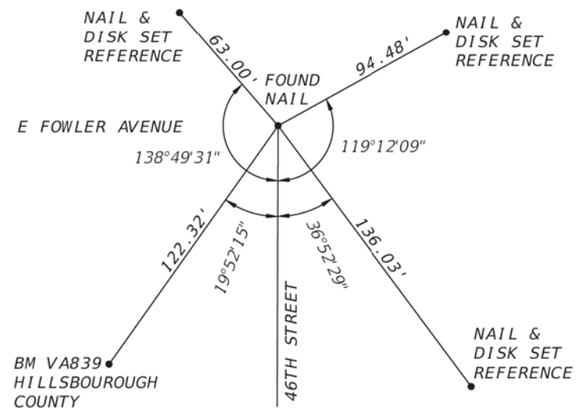
STATION 60+00
SET NAIL & DISK #7203



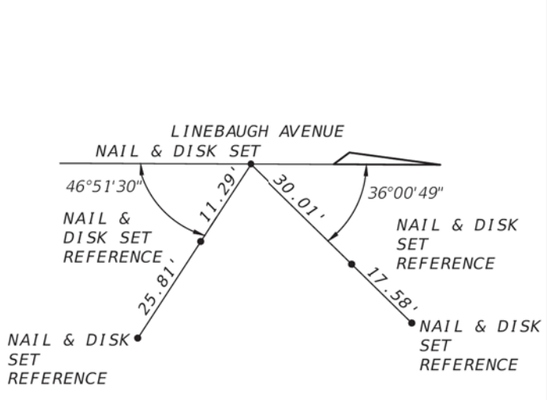
STATION 70+00
SET NAIL & DISK #7203



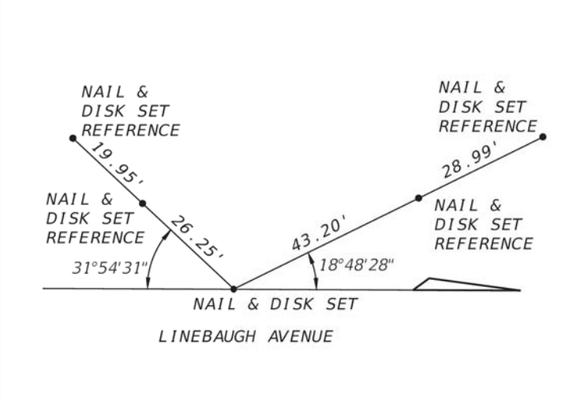
STATION 80+00
SET NAIL & DISK #7203



END STATION 89+79.95
FOUND NAIL



STATION 101+00
SET NAIL & DISK #7203



STATION 109+00
SET NAIL & DISK #7203

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PROJECT CONTROL

SHEET NO. 10

GENERAL NOTES

ROADWAY

1. BENCHMARK ELEVATIONS SHOWN ON THE PLANS ARE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

2. ALL SURVEY INFORMATION WAS OBTAINED FROM A LICENSED FLORIDA PROFESSIONAL SURVEYOR AND MAPPER AND UTILIZED AS SUPPORTING DATA IN THE PRODUCTION OF DESIGN PLANS AND FOR CONSTRUCTION ON N 46TH ST FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE).
THE PROFESSIONAL SURVEYOR AND MAPPER OF RECORD IS:

   RUSSELL P. HYATT, P.S.M.
   P.S.M. NO.: 5303
   HYATT SURVEY SERVICES, INC.
   2012 LENA RD,
   BRADENTON, FL 34211
   CERTIFICATE OF AUTHORIZATION: 4213

3. INFORMATION AND SUBSEQUEST LOCATION OF THE RIGHT OF WAY LINES INDICATED HEREIN WERE OBTAINED BY A REVIEW OF THE LAST DEED OF RECORD AVAILABLE PER HILLSBOROUGH COUNTY, FLORIDA CLERK OF THE CIRCUIT COURT WEBSITE TOGETHER WITH PERTINENT STATE ROAD DEPARTMENT MAPS:
STATE ROAD RIGHT OF WAY MAP SECTION 10290-2505 (FOWLER AVENUE)
STATE ROAD RIGHT OF WAY MAP SECTION 10310-2501 (BUSCH BOULEVARD)

   TITLE WORK WAS NOT PROVIDED.

4. LANE DIRECTION ARROWS ARE FOR INFORMATIONAL PURPOSES ONLY.

5. ALL PARTIAL STATION CALL OUTS IN THE PLANS ARE BASED ON ℄ SURVEY N 46TH ST.

6. PROPOSED FLARED DRIVEWAYS TO BE CONSTRUCTED UTILIZING "OPTION B SIDEWALK FLARE" WHEN CONNECTING TO PROPOSED SIDEWALK (STANDARD PLAN INDEX 522-003).

7. PROPOSED SPOT ELEVATIONS PROVIDED AT BACK OF SIDEWALKS (WHEN NEEDED) ALONG THE ℄ SURVEY AT EVEN 20' INCREMENTS. ELEVATIONS ALSO INCLUDED IN BACK OF SIDEWALK PLAN CALLOUTS.

8. REFER TO DRIVEWAY HALF SECTIONS FOR DRIVEWAY WIDTHS AND TIE-DOWN LIMITS.

9. ROADWAY WIDENING TO MAINTAIN A MINIMUM WIDTH OF 2'.

10. PROP. SWK. WITHIN EXIST. SWK. TO MATCH EXIST. ADJACENT JOINTS.

11. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND THE FDOT DISTRICT CONTAMINATION IMPACT COORDINATOR (DCIC) IMMEDIATELY IF THERE IS EVIDENCE OF CONTACT WITH A CONTAMINATION SITE.

12. RESOLUTION OF ANY CONTAMINATED OR HAZARDOUS MATERIALS INVOLVEMENT AT IDENTIFIED OR ENCOUNTERED AREAS BY THE CONTRACTOR WILL BE COORDINATED BY CITY OF TAMPA WITH THE APPROPRIATE REGULATORY AGENCIES.
CITY OF TAMPA WILL UNDERTAKE, AT ITS OWN EXPENSE, ANY REMEDIAL ACTIONS NECESSARY TO ALLOW THE CONTRACTOR TO CONTINUE CONSTRUCTING THE PROJECT.

DRAINAGE

1. ALL EXISTING DRAINAGE STRUCTURES AND PIPES WITHIN THE PROJECT LIMITS ARE TO REMAIN UNLESS OTHERWISE NOTED.

2. INFORMATION FOR THE EXISTING STORM DRAIN SYSTEM HAS BEEN PROVIDED ON ROADWAY PLAN SHEET (15).

UTILITIES

1. INFORMATION FOR THE EXISTING SANITARY SEWER SYSTEM HAS BEEN PROVIDED ON UTILITY ADJUSTMENT SHEET (15).

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

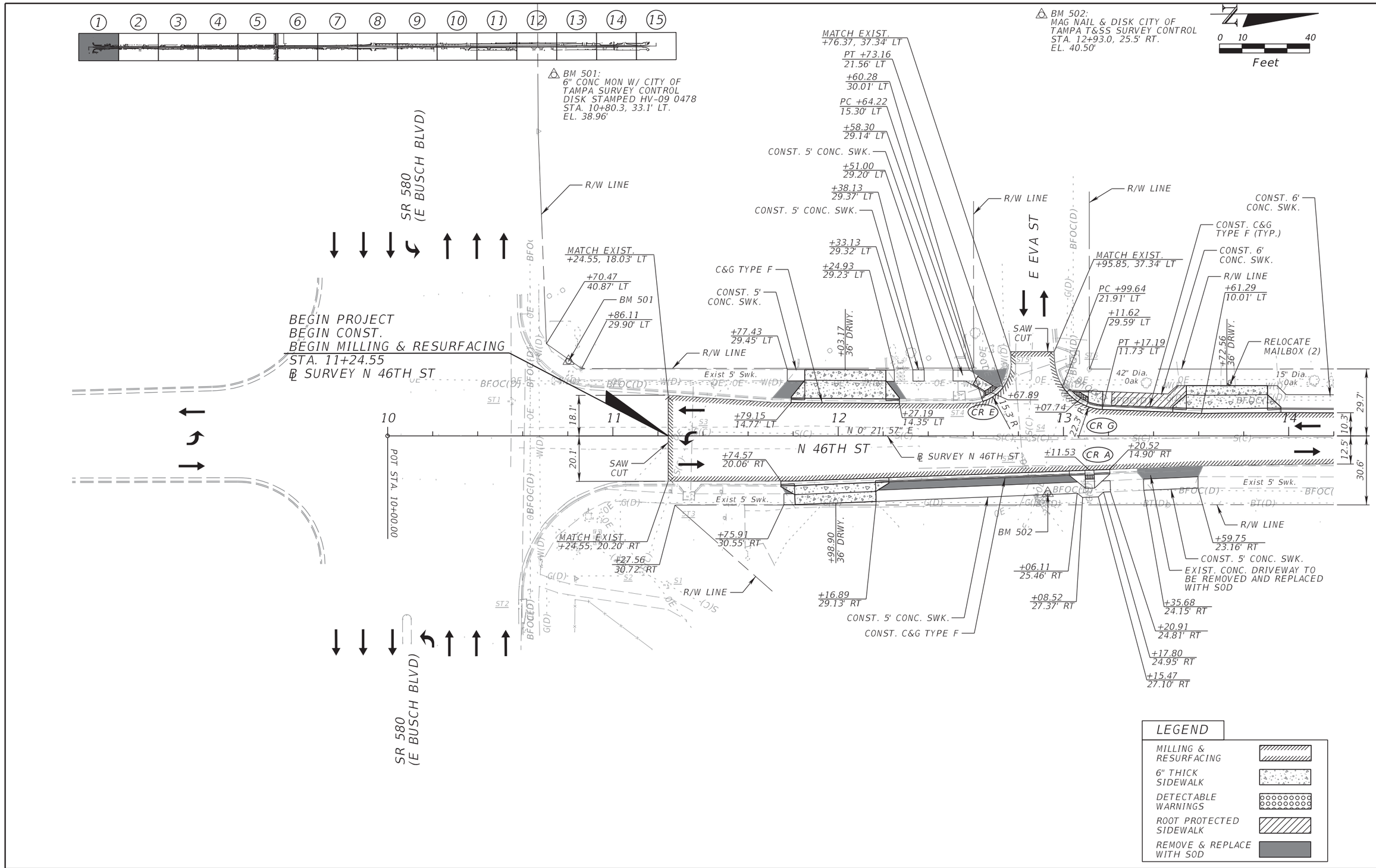
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

GENERAL NOTES

SHEET NO. 11



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

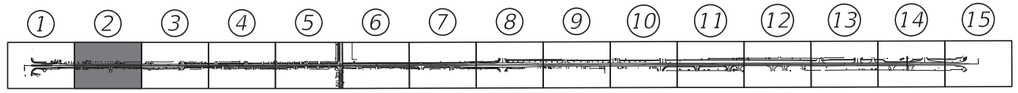
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (1)

SHEET NO. 12



BM 503:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 15+10.2, 13.8' LT.
EL. 37.99'

BM 504:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 17+69.9, 15.6' RT.
EL. 38.26'

N
0 10 40
Feet

E WILMA ST
E SEWAHA ST
N 46TH ST
℄ SURVEY N 46TH ST
N 0° 21' 57" E
BM 504
CR G
S-1
S-2
S-3
S-4
S-5
S-6
S-7
SAW CUT
SPECIAL PROFILE 1
SPECIAL PROFILE 2
SPECIAL PROFILE 3
SPECIAL PROFILE 4
CONST. 6' CONC. SWK.
CONST. C&G TYPE F
R/W LINE
DANGEROUS TREE (TO BE REMOVED)
MATCH EXIST. +25.79, 43.54' LT
7.2' R
PT +25.79 35.24' LT
CONST. 4" CONC. DITCH PAVT.
+11.62 29.71' LT
PC +00.36 9.91' LT
+71.26 36' DRWY.
20" Dia. Oak
3' R
+14.86
+52.78
MATCH EXIST. +48.16, 43.54' LT
+50.92 19.88' LT
+62.03 29.48' LT
PC +63.66 19.88' LT EL. 37.89
PRC +69.55 21.80' LT EL. 37.90
PT +75.42 23.71' LT EL. 37.91
EL. 37.94
EL. 37.97
10' R
PT +59.22 21.71' LT EL. 38.02
PRC +55.85 22.71' LT EL. 38.01
PC +52.48 23.71' LT EL. 38.01
MATCH EXIST. +77.25, 37.15' LT
PT +75.97 29.03' LT
CONST. 4 LF OF 18" RCP PIPE CONST. CONC. JACKET
+72.68 21.71' LT
CONST. 4 LF OF 24" RCP PIPE CONST. CONC. JACKET
+61.68 29.60' LT
CONST. 5' CONC. SWK.
EL. 38.15
EL. 38.07
EL. 38.05
PC +51.86 10.56' LT
EL. 38.12
EL. 38.10
6.2' R
+95.46
+99.57
+70.78
25' R
MATCH EXIST. +96.50, 37.15' LT
PC +97.38 29.03' LT
+98.36 26.23' LT
CONST. 4 LF OF 18" RCP PIPE CONST. CONC. JACKET
+11.92 29.27' LT
+07.43 15.22' LT
EL. 38.52
+13.89 12.15' LT
PT +20.59 11.07' LT
CONST. 68 LF OF 18" RCP PIPE
EL. 38.50
EL. 38.48
CONST. 5' CONC. SWK.
EL. 38.46
EL. 38.44
CONST. 68 LF OF 18" RCP PIPE
R/W LINE
EL. 38.65
EL. 38.42
EL. 38.48
EL. 38.65
CONST. 4" CONC. DITCH PAVT.
+20.59
+71.99
+96.07
40' R
+44.32
CONST. 4" CONC. DITCH PAVT.
Exist 5' Swk.
+37.75 12.64' RT
R/W LINE
+16.36 12.83' RT
+14.42 22.49' RT
CONST. 5' CONC. SWK.
CONST. 4" CONC. DITCH PAVT
CONST. 4 LF OF 12" RCP PIPE CONST. CONC. JACKET
+39.27 23.11' RT
+90.36 23.02' RT
+98.80 11.41' DRWY.
+39.27 12.17' RT
CONST. 4" CONC. DITCH PAVT
CONST. 4 LF OF 15" RCP PIPE CONST. CONC. JACKET
CONST. 5' CONC. SWK.
+30.89 22.85' RT
+30.89 11.81' RT
PC +71.99 11.83' RT
+82.64 22.55' RT
CONST. 5' CONC. SWK.
+99.24 22.58' RT
+96.69 30.44' RT
MATCH EXIST. PT +11.96, 51.83' RT
+13.96
R/W LINE
+62.27 20.28' RT
+65.32 11.79' RT
+47.16 30.80' RT
MATCH EXIST. +31.47, 51.83' RT
+89.21 20.42' RT
CONST. 5' CONC. SWK.
+84.21 20.33' RT
++75.48 11.57' RT
+73.17 20.39' RT
CONST. 4" CONC. DITCH PAVT.
CONST. 4 LF OF 15" RCP PIPE CONST. CONC. JACKET
29.7'
10.3'
12.5'
30.6'
29.5'
10.6'
11.1'
30.5'

LEGEND
- MILLING & RESURFACING
- 6" THICK SIDEWALK
- DETECTABLE WARNINGS
- WIDENING
- REMOVE & REPLACE WITH SOD

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

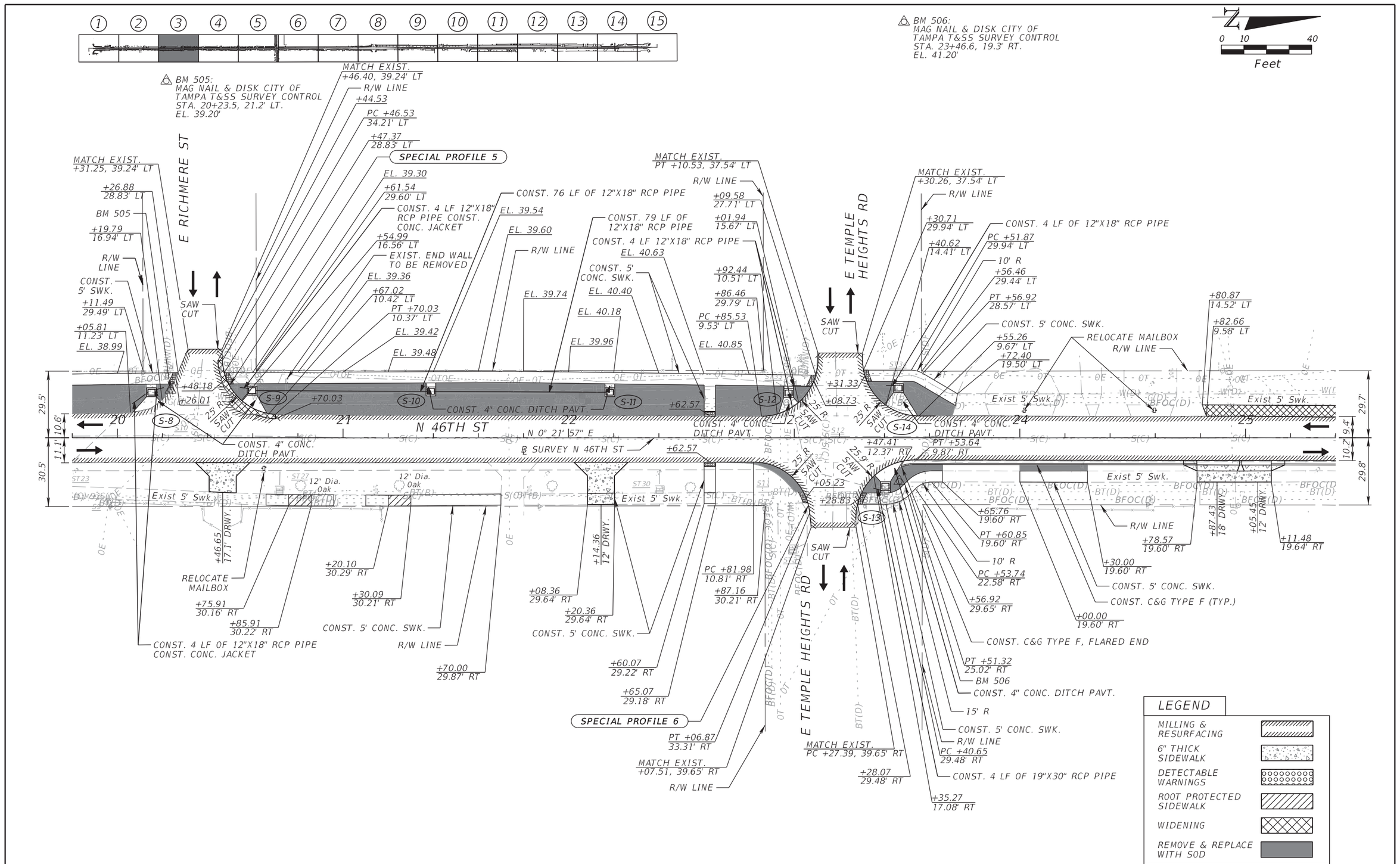
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (2)

SHEET NO. 13



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

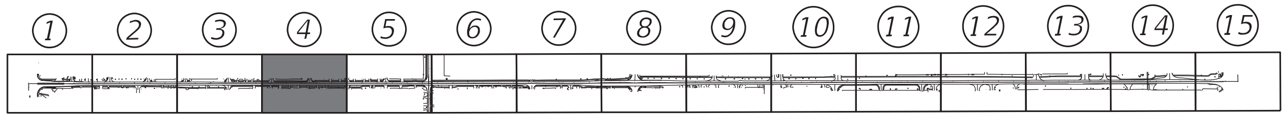
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (3)

SHEET NO. 14

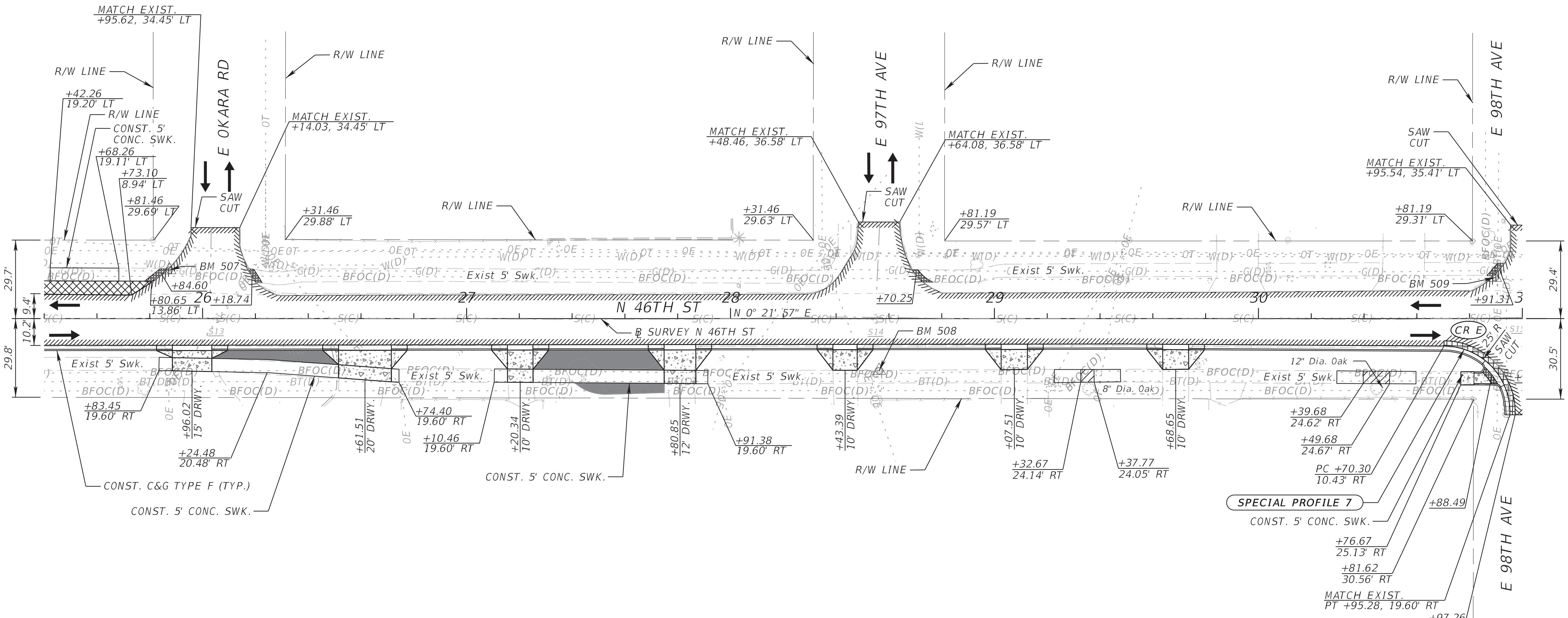


BM 507:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 25+87.4, 18.4' LT.
EL. 47.33'

BM 508:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 28+56.3, 19.7' RT.
EL. 57.52'

BM 509:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 30+89.7, 15.5' LT.
EL. 66.22'

0 10 40
Feet



LEGEND

- MILLING & RESURFACING
- 6" THICK SIDEWALK
- DETECTABLE WARNINGS
- ROOT PROTECTED SIDEWALK
- WIDENING
- REMOVE & REPLACE WITH SOD

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

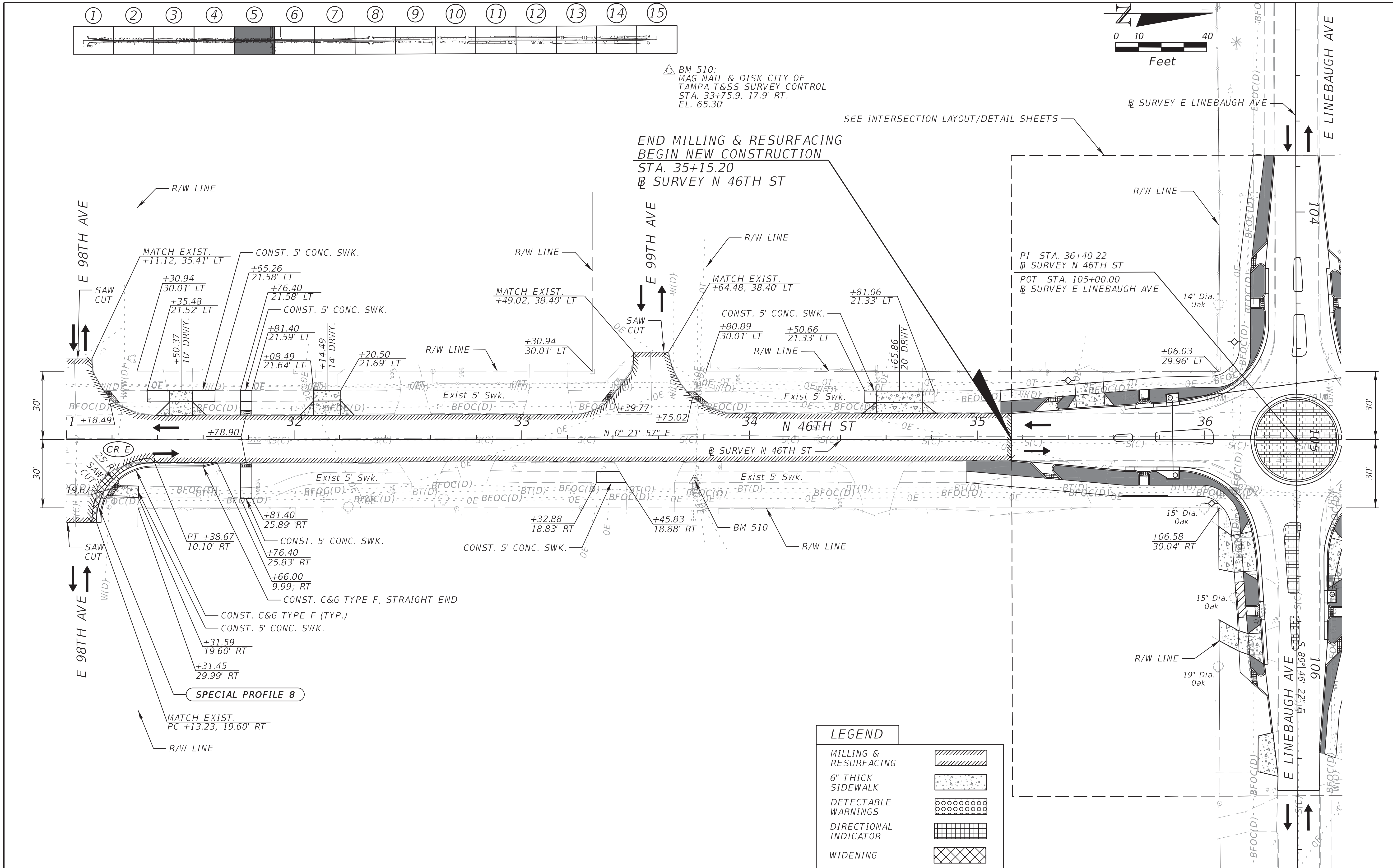
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (4)

SHEET NO.
15



BM 510:
MAG NAIL & DISK CITY OF TAMPA T&SS SURVEY CONTROL
STA. 33+75.9, 17.9' RT.
EL. 65.30'
END MILLING & RESURFACING
BEGIN NEW CONSTRUCTION
STA. 35+15.20
℄ SURVEY N 46TH ST
SEE INTERSECTION LAYOUT/DETAIL SHEETS
℄ SURVEY E LINEBAUGH AVE
E LINEBAUGH AVE
E 98TH AVE
E 99TH AVE
N 46TH ST
R/W LINE
MATCH EXIST. +11.12, 35.41' LT
CONST. 5' CONC. SWK.
SAW CUT
PI STA. 36+40.22 ℄ SURVEY N 46TH ST
POT STA. 105+00.00 ℄ SURVEY E LINEBAUGH AVE
Exist 5' Swk.
N 0° 21' 57" E
℄ SURVEY N 46TH ST
CONST. C&G TYPE F, STRAIGHT END
CONST. C&G TYPE F (TYP.)
SPECIAL PROFILE 8
MATCH EXIST. PC +13.23, 19.60' RT
BM 510
LEGEND
MILLING & RESURFACING
6" THICK SIDEWALK
DETECTABLE WARNINGS
DIRECTIONAL INDICATOR
WIDENING

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

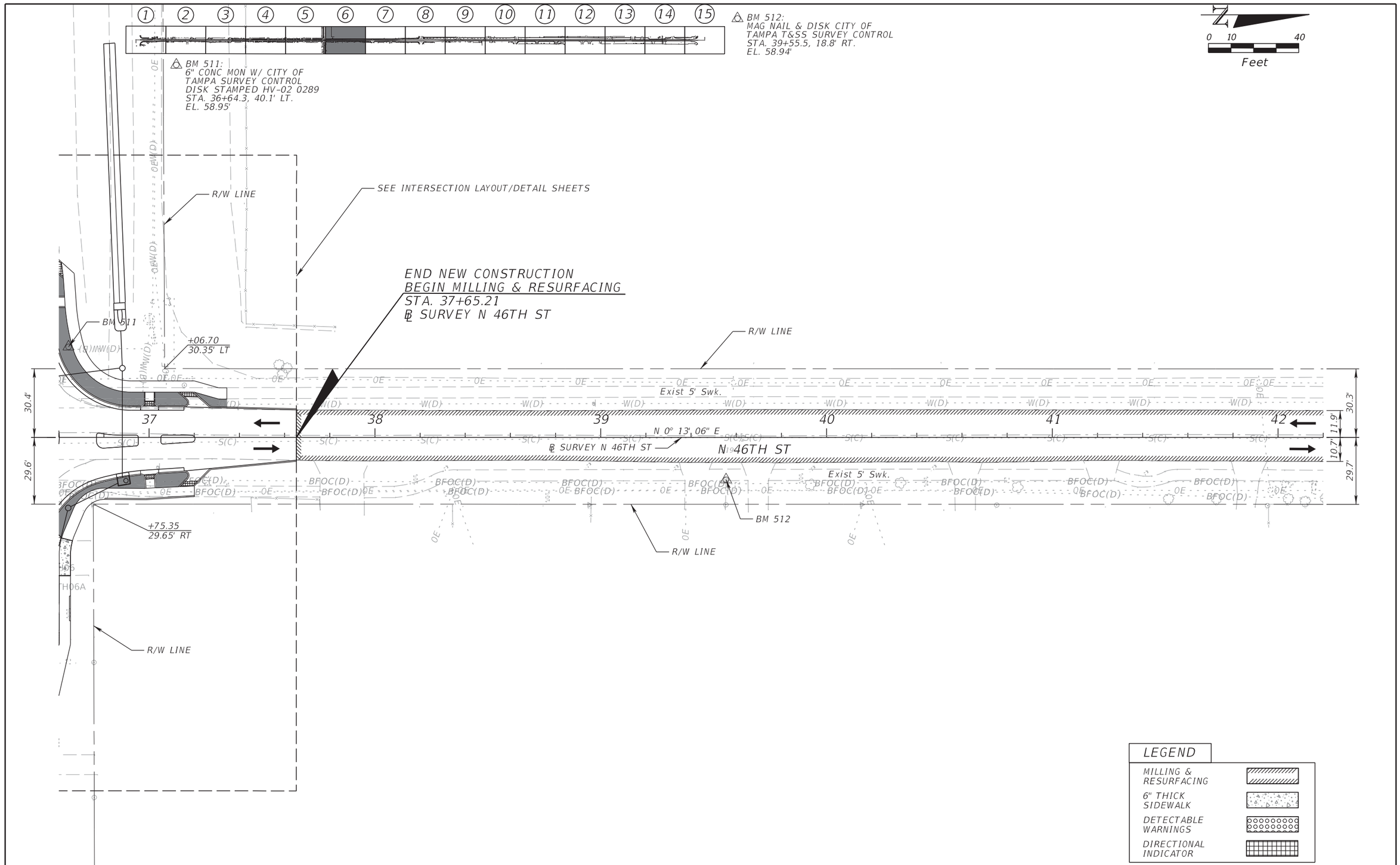
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (5)

SHEET NO. 16



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

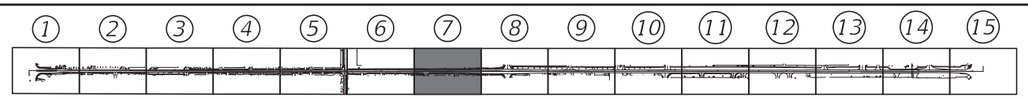
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (6)

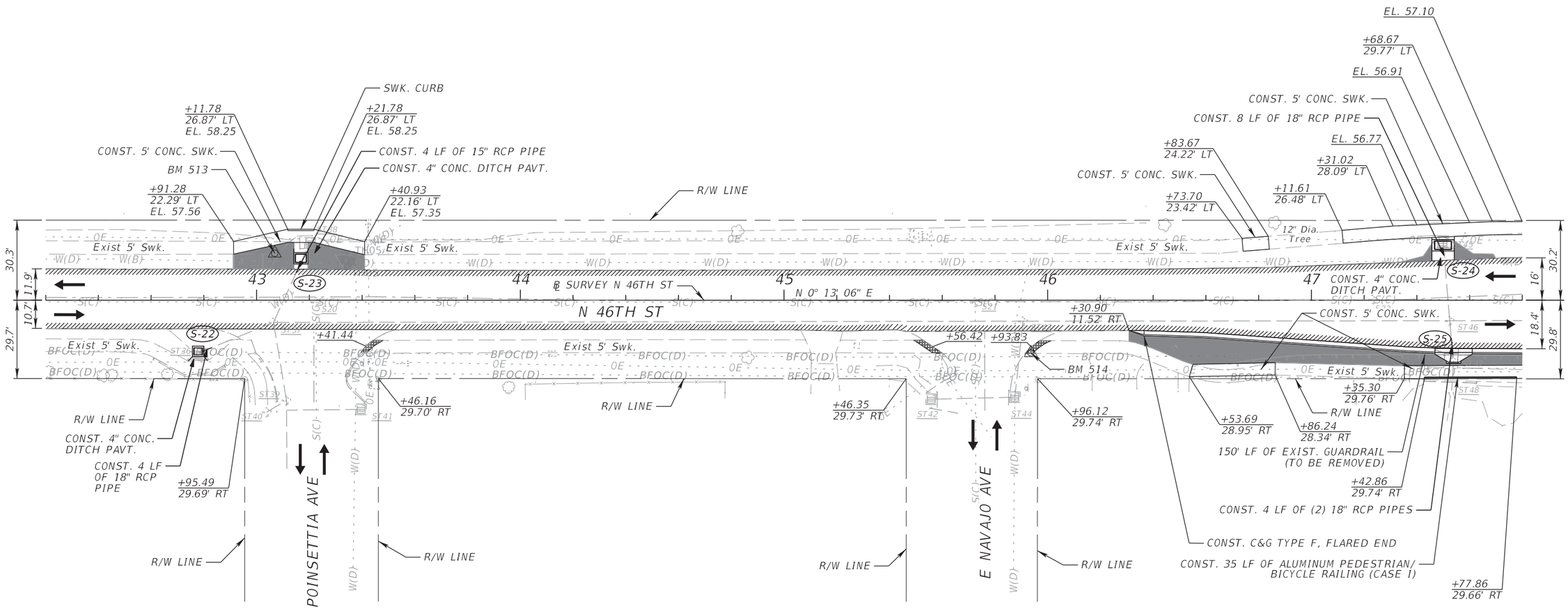
SHEET NO. 17



BM 513:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 43+06.9, 17.8' LT.
EL. 57.07'

BM 514:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 45+93.6, 20.0' RT.
EL. 56.80'

0 10 40
Feet



LEGEND

- MILLING & RESURFACING
- DETECTABLE WARNINGS
- REMOVE & REPLACE WITH SOD

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (7)

SHEET NO. 18

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

N
0 10 40
Feet

BM 515:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 49+68.3, 41.6' LT.
EL. 57.01'

E BOUGAINVILLEA AVE

R/W LINE

R/W LINE

MATCH EXIST.
+82.78, 79.32' LT

SAW CUT

MATCH EXIST.
+18.84, 79.22' LT

PT +53.49
17.86' LT

PC +65.84
43.37' LT
EL. 57.19

PC +19.54
49.58' LT

+23.94
43.39' LT
EL. 56.57

+33.12
55.18' LT

+34.36
50.00' LT

EL. 56.84

PT +82.53
45.67' LT
EL. 57.22

PC +85.38
46.48' LT
EL. 57.19

PT +01.98
48.78' LT
EL. 56.99

EL. 56.94

EL. 56.89

RELOCATE & RESET 465
LF OF EXIST. BLACK
VINYL W/ BARBED WIRE
FENCE TO R/W LINE

CONST. 10'
CONC. SWK.

EL. 56.84

R/W LINE

EL. 56.78

EL. 56.73

PC +09.75
48.50' LT
EL. 56.70

6' SHLDR. (UNPAVED)

PT +26.34
46.12' LT
EL. 56.94

PC +29.19
45.29' LT
EL. 56.97

PCC +45.87
42.91' LT
EL. 57.10

PT +62.56
45.20' LT
EL. 56.86

PC +65.41
46.02' LT
EL. 56.82

PT +83.25
48.30' LT
EL. 56.56

EL. 56.57

EL. 56.61

EL. 56.59

CONST. 5' CONC. SWK.

+97.64
29.86' LT

+16.83
27.75' LT

+31.32
26.28' LT

24" Dia. Tree

18" Dia. Tree

R/W LINE

Exist 5' Swk.

BM 515

+64.36
30.21' LT

PT +76.85
36.76' LT

38.2' R

CR A

+28.32

PC +70.83
29.19' LT
+68.11

39.7' R

+44.50

CR A

15" Dia. Oak

60' R

15" Dia. Oak

18" Dia. Oak

12" Dia. Oak

60' R

15" Dia. Oak

60' R

15" Dia. Oak

EXIST. CURB
(TO REMAIN)

30.2'
16'
18.4'
29.8'

48 49 50 51 52 53

N 0° 13' 06" E

50'
12.7'
12'
29.8'

N 46TH ST

+55.45
18.87' RT

℄ SURVEY N 46TH ST

+48.59
22.83' RT

39.4' R

CR D

+66.63

CR A

39.1' R

+44.22

RELOCATE
MAILBOX

4X15" Dia. Oak

15" Dia. Tree

6" Dia. Tree

+61.76
29.47' RT

R/W LINE

+44.47
10' DRWY.

150' LF OF EXIST. GUARDRAIL
(TO BE REMOVED)

CONST. C&G TYPE F

CONST. 5' CONC. SWK.

Exist 5' Swk.

+47.08
24.34' RT

+47.08
29.14' RT

+50.14
29.79' RT

PC +56.11
20.79' RT

+65.13
44.79' RT

PT +74.32
33.60' RT

EXIST. FENCE
(TO BE REMOVED)

+82.84
57.09' RT

MATCH EXIST.
+82.78, 82.09' RT

R/W LINE

+26.52

CR E

PC +22.65
42.21' RT

SAW CUT

E SERENA DR

EL. 57.46

EL. 57.59

PT +53.05
19.31' RT

+51.86
27.65' RT
EL. 57.58

EXIST. FENCE
(TO BE REMOVED)

EXIST. 12" TREES (2)
TO BE REMOVED

+34.70
44.80' RT
EL. 57.91

+34.70
49.52' RT

MATCH EXIST.
+19.23, 82.18' RT

R/W LINE

+67.85
27.65' RT
EL. 57.08

EL. 57.20

+73.86
12' DRWY.

CONST. 5' CONC. SWK.

EL. 57.29

R/W LINE

EL. 57.37

+93.11
27.72' RT
EL. 57.66

+77.64
27.65' RT
EL. 57.24

+24.85
27.95' RT
EL. 57.46

+33.63
27.31' RT
EL. 57.23

+45.18
26.47' RT
EL. 57.23

EL. 56.91

EL. 56.70

+90.09
23.17' RT
EL. 56.58

+02.28
23.17' RT
EL. 56.58

RELOCATE MAILBOX

+15.28
22.87' RT
EL. 56.13

+25.48
16' DRWY.

+35.38
22.41' RT
EL. 55.97

LEGEND

- MILLING & RESURFACING
- 6" THICK SIDEWALK
- DETECTABLE WARNINGS
- ROOT PROTECTED SIDEWALK
- REMOVE & REPLACE WITH SOD

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

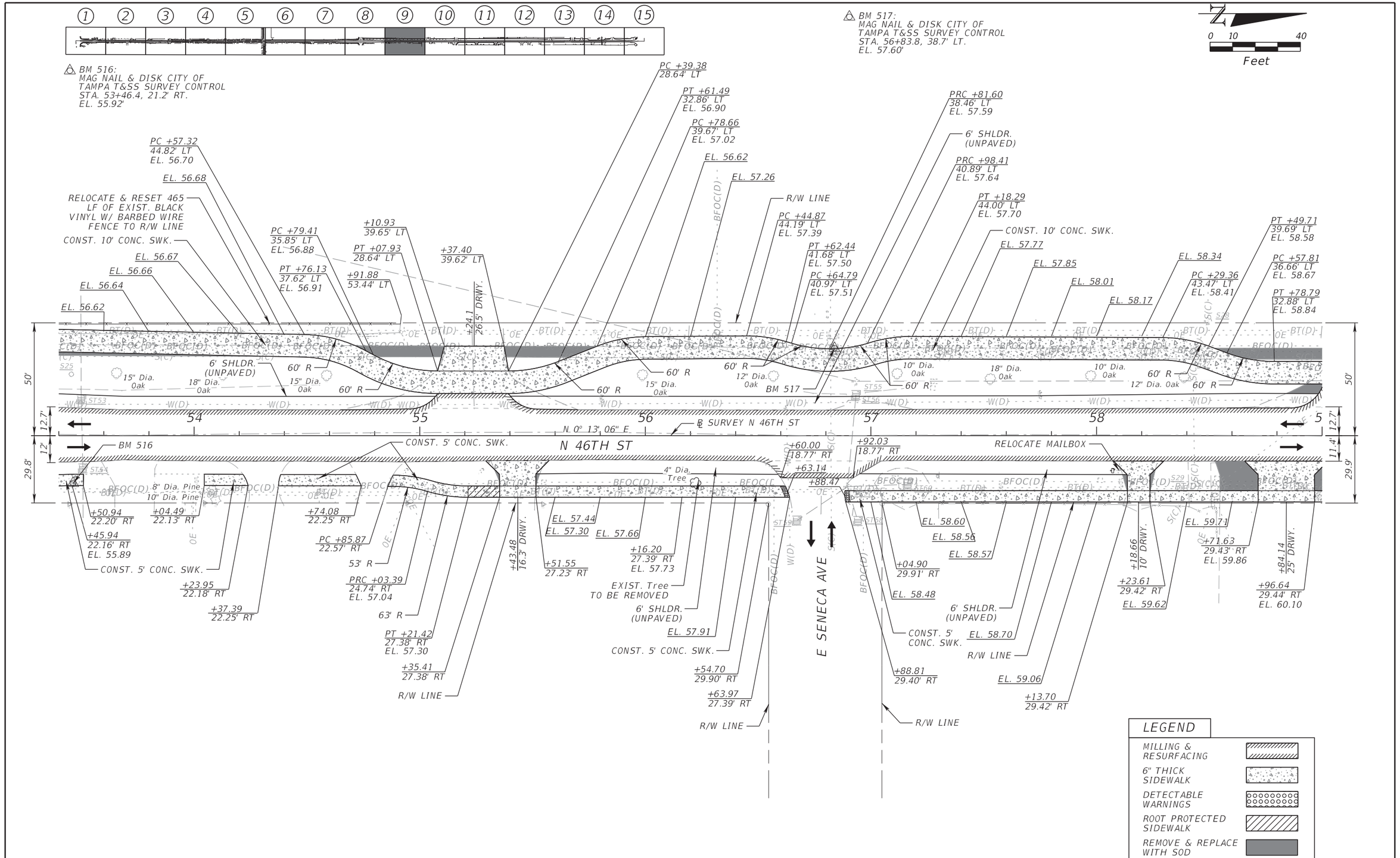
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (8)

SHEET NO. 19



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

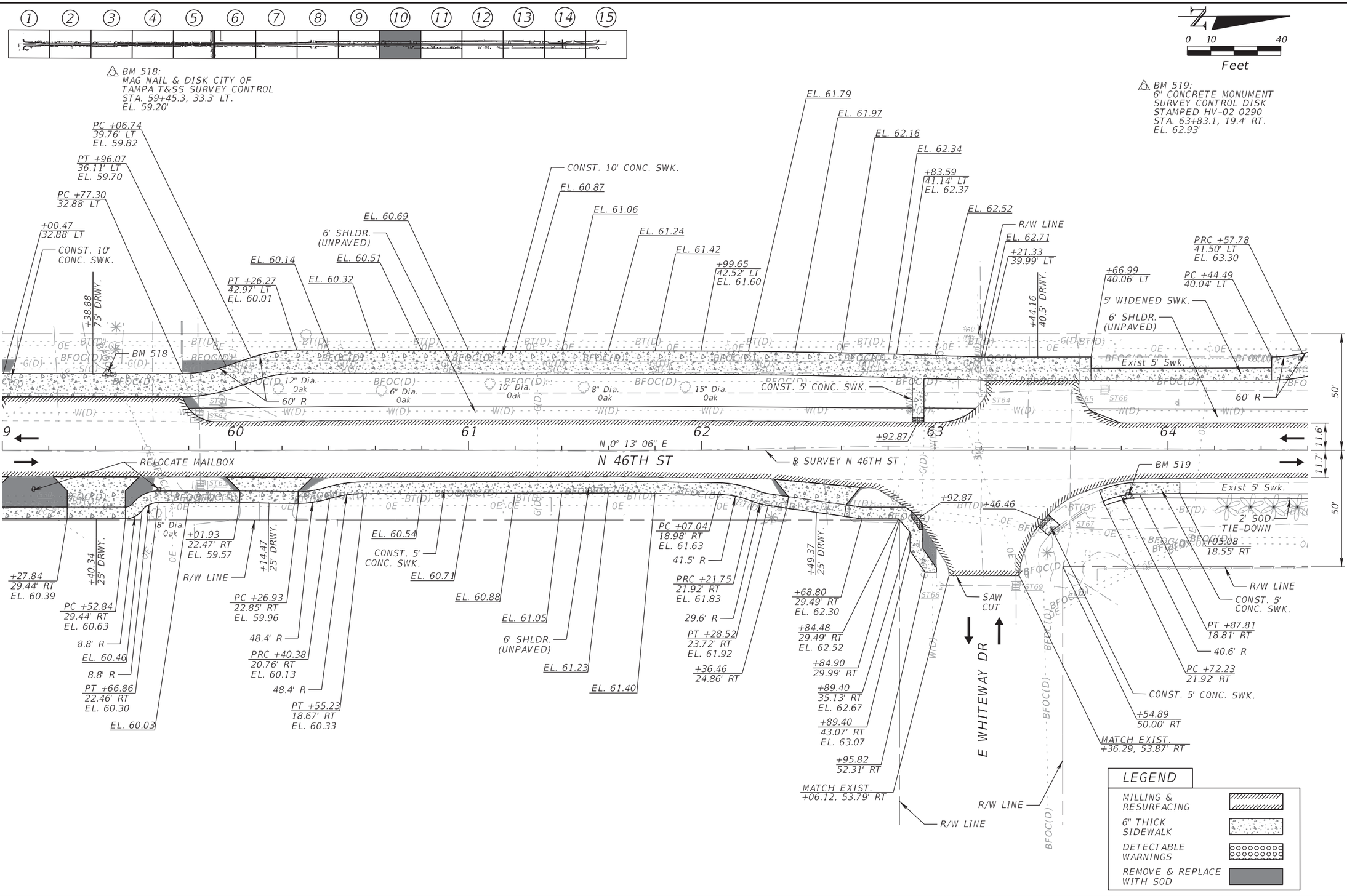
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (9)

SHEET NO. 20



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

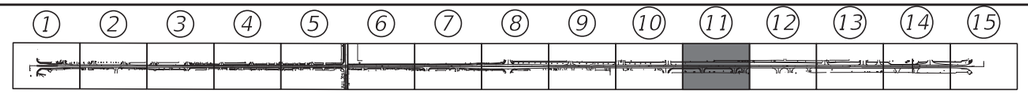
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (10)

SHEET NO. 21



BM 520:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 67+43.7, 35.7' LT.
EL. 65.96'

N

0 10 40
Feet

CONST. 10' CONC. SWK.
PC +97.40
43.15' LT
EL. 63.58
PT +70.54
42.97' LT
EL. 63.38
PRC +11.20
41.64' LT
EL. 63.69
PT +24.49
40.13' LT
60' R
60' R
6' SHLDR.
(UNPAVED)
CONST. 5' WIDENED SWK.
R/W LINE
BM 520
PC +14.08
40.05' LT
Exist 5' Swk.
Exist 5' Swk.
50'
11.7'
11.6'
65
66
67
68
69
70
N 0° 13' 06" E
℄ SURVEY N 46TH ST
N 46TH ST
SPECIAL PROFILE 10
+68.08
17.54' RT
+19.39
17.64' RT
PC +39.53
11.67' RT
PT +15.14
11.69' RT
25' R
SAW CUT
Exist 5' Swk.
+02.87
17.24' RT
2' SOD
TIE-ZONE
+48.09
17.24' RT
2' SOD
TIE-ZONE
EXIST. Palm Trees
TO BE REMOVED
+00.01
18.58' RT
+10.01
18.55' RT
CONST. 5' CONC. SWK.
R/W LINE
+05.49
46.44' RT
CONST. 5' CONC. SWK.
EL. 70.46
EL. 70.53
SPECIAL PROFILE 9
EL. 71.12
PT +65.87
36.65' RT
+65.73
49.00' RT
EL. 71.34
+78.31
25' DRWY.
PC +90.12
36.68' RT
+90.89
49.00' RT
EL. 71.74
EL. 71.80
6' SHLDR.
(UNPAVED)
EL. 71.93

LEGEND
MILLING & RESURFACING
6" THICK SIDEWALK
RECONSTRUCTION
REMOVE & REPLACE WITH SOD

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

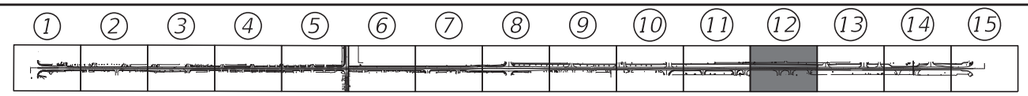
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (11)

SHEET NO. 22



N

0 10 40

Feet

BM 521:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 72+85.2, 23.1' RT.
EL. 72.98'

PT +33.39
36.78' LT
EL. 69.60

PC +44.34
33.00' LT
EL. 69.69

EXIST. SWK.
TO BE REMOVED

PCC +63.89
29.73' LT
EL. 69.85

CONST. 10' CONC. SWK.

PT +80.00
31.93' LT
EL. 69.99

PC +93.67
36.37' LT
EL. 70.11

PT +13.02
39.38' LT

6' SHLDR.
(UNPAVED)

CONST. 5' WIDENED SWK.

R/W LINE

Exist 5' Swk.

60' R

60' R

50'

11.3'

11.7'

71 72 N 46TH ST 73 74 75

N 0° 13' 06" E

℄ SURVEY N 46TH ST

BM 521

6' SHLDR.
(UNPAVED)

EL. 71.93
EL. 72.07
EL. 72.20
EL. 72.33
EL. 72.46
CONST. 5' CONC. SWK.
EL. 72.59
EL. 72.69
EL. 72.75
EL. 72.82
+47.63
49.00' RT
EL. 72.89
EL. 72.95

+73.61
49.00' RT
R/W LINE
EL. 73.52
6' SHLDR.
(UNPAVED)
CONST. 5' CONC. SWK.
EL. 73.76

+45.55
49.00' RT

+71.15
49.00' RT
PC +81.15
49.00' RT
EL. 73.57
69.8' R
PRC +05.19
44.73' RT
EL. 73.82
CONST. 5' CONC. SWK.
69.8' R
PT +29.23
40.47' RT
EL. 73.59
6' SHLDR.
(UNPAVED)

PC +60.97
40.58' RT
EL. 73.28
76.1' R
PRC +84.82
36.83' RT
EL. 73.06
76.1' R
PT +08.68
33.08' RT
EL. 72.83

25.8' R
25' R
+15.92
15' DRWY
PC +23.16
33.13' RT
EL. 72.74
6' SHLDR.
(UNPAVED)
PRC +47.24
37.05' RT
EL. 72.20

PT +71.32
40.97' RT
EL. 71.66
EL. 71.47

LEGEND

MILLING & RESURFACING

6" THICK SIDEWALK

REMOVE & REPLACE WITH SOD

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

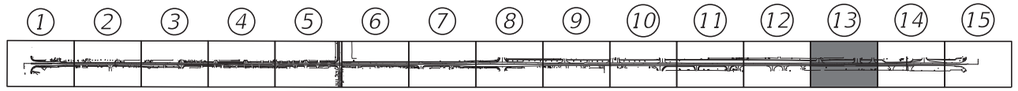
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (12)

SHEET NO. 23



BM 522:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 76+70.9, 34.6' LT.
EL. 70.08'

0 10 40
Feet

BM 523:
MAG NAIL & DISK CITY OF
TAMPA T&SS SURVEY CONTROL
STA. 81+20.6, 17.1' LT.
EL. 62.75'

+80.80
35.55' LT
6' SHLDR.
(UNPAVED)
CONST. 10' CONC. SWK.
+48.68
42' DRWY.
+69.60
34.82' LT
+78.50
35.30' LT
SAW
CUT
CONST. 5' WIDENED SWK.
6' SHLDR.
(UNPAVED)
R/W LINE
+42.77
39.65' LT
+71.70
58' DRWY.
CONST. 5' WIDENED SWK.
6' SHLDR. (UNPAVED)
+00.63
39.52' LT
+82.91
39.41' LT
+99.99
34' DRWY.
CONST. 5'
WIDENED SWK.
+17.26
39.34' LT
Exist 5' Swk.
Exist 5' Swk.
Exist 5' Swk.
BM 522
BM 523
CONST. 5' CONC. SWK.
EXIST. CURB
(TO REMAIN)
+74.06
24.93' LT
+23.98
25.19' LT
+41.76
17.68' LT
+98.07
17.28' LT
+22.11
+22.11
76
77
78
79
80
81
N 0° 13' 06" E
℄ SURVEY N 46TH ST
N 46TH ST
50'
11.7'
13'
11.5'
13.9'
50'
CONST. 5' CONC. SWK.
12" Dia. Palms
15" Dia. Palm
+71.11
42.21' RT
EL. 63.55
EL. 63.78
R/W LINE
+24.61
42.21' RT
EL. 63.98
EL. 63.36
EL. 63.25
EL. 63.15
EL. 63.04
EL. 62.93
EL. 62.85
EL. 62.81
EL. 62.77
6' SHLDR.
(UNPAVED)
EL. 66.65
CONST. 5'
CONC. SWK.
EL. 67.09
EL. 67.53
EL. 67.96
EL. 68.40
EL. 68.84
EL. 69.28
EL. 69.72
EL. 70.16
EL. 70.60
EL. 71.03
EL. 71.47
EL. 64.45
EL. 64.89
EL. 65.33
EL. 65.77
6' SHLDR.
(UNPAVED)
EL. 66.21

LEGEND

MILLING & RESURFACING	
6" THICK SIDEWALK	
DETECTABLE WARNINGS	
REMOVE & REPLACE WITH SOD	

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

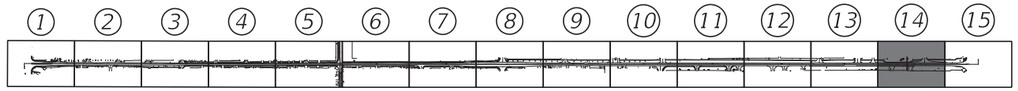
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (13)

SHEET NO. 24



BM 524:
MAG NAIL & DISK CITY OF TAMPA T&SS SURVEY CONTROL
STA. 85+61.9, 33.1' LT.
EL. 62.84'

N

0 10 40
Feet

CONST. 5' WIDENED SWK.
PC +56.31
39.27' LT
PT +77.17
34.78' LT
EL. 62.67
CONST. 10' CONC. SWK.
PC +93.83
27.93' LT
EL. 62.86
PT +16.78
23.42' LT
EL. 63.00
60' R
Exist 5' Swk.
BFOC(D)
OE
G(D)
W(D)
3X8" Dia. Oak
(2) 15" Dia. Palm
12" Dia. Palm
PT +05.95
29.65' LT
EL. 64.60
CONST. 10' CONC. SWK.
ABANDONED RAIL CORRIDOR
(TO BE REMOVED WITHIN R/W LIMITS)
PC +84.06
25.04' LT
EL. 63.94
+91.43
11.96' LT
CONST. 5' WIDENED SWK.
PT +36.87
38.48' LT
EL. 65.55
R/W LINE
PC +16.15
33.90' LT
EL. 64.93
SPECIAL PROFILE 11
+12.32
42.00' LT
PT +12.32
37.72' LT
+06.01
41.84' LT
6' SHLDR. (UNPAVED)
CONST. 5' WIDENED SWK.
+77.69
40.32' LT
+67.70
39.82' LT
60' R
Exist 5' Swk.
+12.32
50.00' LT
+29.29
33.9' DRWY.
25' R
+46.26
50.00' LT
+48.01
42.86' LT
PC +46.26
38.05' LT
SPECIAL PROFILE 12
+48.01
43.32' LT
BM 524
PT +71.11
13.05' LT
CONST. 5' WIDENED SWK.
Exist 5' Swk.
6' SHLDR. (UNPAVED)
50'
11.5'
13.9'
15.1'
11.6'
36.7'
82
83
84
85
86
87
+76.56
11.72' LT
+76.60
11.17' RT
+91.47
11.12' RT
PC +87.53
12.72' LT
N 0° 13' 06" E
℄ SURVEY N 46TH ST
N 46TH ST
15' R
9' R
+08.91
25' DRWY.
+59.63
20' DRWY.
EL. 62.73
EL. 62.69
6' SHLDR. (UNPAVED)
EL. 62.64
CONST. 5' CONC. SWK.
EL. 62.77
EL. 62.60
EL. 62.56
+49.63
48.93' RT
PC +73.88
36.78' RT
EL. 63.20
+69.63
48.98' RT
R/W LINE
EL. 64.07
PT +54.86
25.00' RT
EL. 63.98
147.7' R
6' SHLDR. (UNPAVED)
PRC +14.34
30.91' RT
EL. 63.59
EL. 63.46
146.4' R
EL. 64.21
EL. 64.26
R/W LINE
EL. 64.30
EL. 64.09
EL. 63.89
6' SHLDR. (UNPAVED)
EL. 63.68
EL. 63.47
EL. 63.27
EL. 63.06
EL. 62.86
EL. 62.50
EL. 62.07
+79.81
25.00' RT
EL. 61.63
+79.81
36.70' RT
PC +94.72
35.76' RT
EL. 61.56
5' R
PT +97.65
36.70' RT
EL. 61.55

LEGEND

- MILLING & RESURFACING
- 6" THICK SIDEWALK
- REMOVE & REPLACE WITH SOD
- RECONSTRUCTION

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

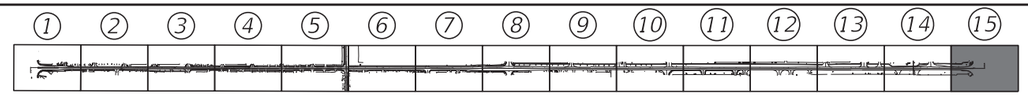
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

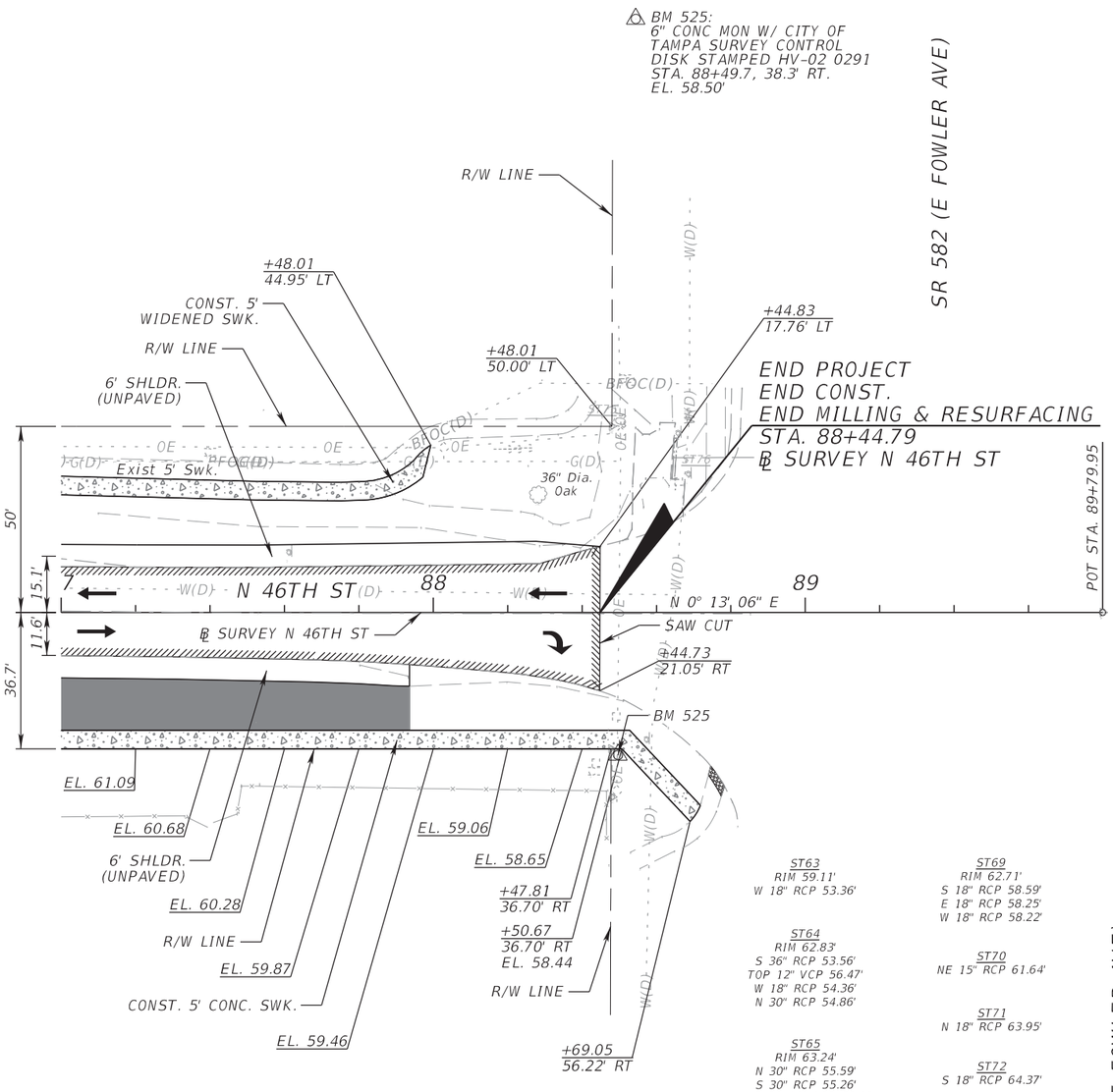
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

ROADWAY PLANS (14)

SHEET NO. 25





ST1
RIM 39.32'
E/W 6'x5" BOX
BOTTOM 29.13'

ST2
W 48" RCP 32.60'
E 48" RCP 32.56'

ST3
RIM 39.71'
W 18" RCP 32.61'

ST4
RIM 40.08'
W 6" CIP 37.51'
NW 15" RCP 32.91'

ST5
RIM 39.62'
NW 15" RCP 32.35'
SE 15" RCP 32.29'
E 18" RCP 30.46'
W 18" RCP 30.35'

ST6
RIM 39.49'
SE 15" RCP 33.12'

ST7
RIM 40.06'
W 18" RCP 30.32'
S 53"x83" RCP 30.37'
N 53"x83" RCP 30.11'

ST8
RIM 37.98'
NW 18" RCP 30.88'
S 53"x83" RCP 30.58'
N 53"x83" RCP 30.58'

ST9
RIM 38.16'
W 12" RCP 33.69'

ST10
RIM 37.81'
N 15" RCP 31.50'

ST11
RIM 37.87'
S 15" RCP 31.21'
N 15" RCP 31.01'
W 18" RCP 31.01'
SE 18" RCP 30.98'

ST12
RIM 38.12'
S 15" RCP 31.43'

ST13
RIM 38.45'
W 15" RCP 32.89'

ST14
RIM 38.59'
S 53"x83" RCP 31.20'
N 53"x83" RCP 30.99'

ST15
RIM 38.64'
N 18" RCP 34.16'
E 24" RCP 34.27'

ST16
RIM 38.10'
E 15" RCP 34.49'
W 24" RCP 33.59'
S 53"x83" RCP 31.16'
N 53"x83" RCP 31.01'

ST17
RIM 38.08'
W 15" RCP 35.00'

ST18
RIM 38.41'
S 53"x83" RCP 31.28'
N 53"x83" RCP 31.12'

ST19
RIM 38.70'
N 15" RCP 35.36'
S 18" RCP 35.26'

ST20
GRATE 38.50'
W 15" RCP 34.05'
E 15" RCP 33.85'

ST21
15" RCP 35.59'

ST22
15" RCP 36.35'

ST23
RIM 39.33'
NW 12"x18" RCP 32.81'
N 48" RCP 31.70'
S 53"x83" RCP 31.60'

ST24
RIM 39.46'
N 12"x18" RCP 35.66'
SE 12"x18" RCP 32.94'

ST25
RIM 39.60'
N 12"x18" RCP 35.95'
S 12"x18" RCP 35.85'

ST26
12"x18" RCP 36.16'

ST27
GRATE 38.75'
W 15" RCP 37.00'

ST28
12" RCP 38.47'

ST29
12" RCP 38.62'

ST30
GRATE 40.35'
W 12" RCP 38.35'

ST31
GRATE 39.83'
NW 12"x18" RCP 35.29'

ST32
RIM 41.05'
N 19"x30" RCP 35.85'
W 12"x18" RCP 34.84'
E 36" RCP 33.02'
S 48" RCP 32.97'

ST33
RIM 41.61'
N 12"x18" RCP 35.33'
NE 12"x18" RCP 35.56'

ST34
RIM 41.77'
S 12"x18" RCP 35.98'

ST35
RIM 41.96'
S 19"x30" RCP 36.06'

ST36
RIM 57.33'
NW 18" RCP 52.83'

ST37
RIM 57.58'
N 24" RCP 51.26'
NW 15" RCP 54.66'
SE 18" RCP 52.36'
E 18" RCP 52.85'

ST38
RIM 56.76'
SE 15" RCP 54.90'

ST39
RIM 58.91'
W 18" RCP 53.34'
SE 15" RCP 54.13'
E 18" RCP 53.33'

ST40
RIM 59.29'
NW 15" RCP 54.01'

ST41
RIM 58.57'
S 15" RCP 56.23'

ST42
RIM 56.27'
N 15" RCP 51.32'

ST43
RIM 56.83'
N 24" RCP 50.13'
S 24" RCP 50.23'
E 18" RCP 51.21'

ST44
RIM 57.25'
W 18" RCP 51.35'
S 15" RCP 51.42'

ST45
RIM 55.86'
E 18" RCP 52.55'

ST46
RIM 56.43'
N 24" RCP 49.36'
S 24" RCP 49.57'
E 18" RCP 49.91'
W 18" RCP 52.28'

ST47
RIM 56.66'
E 18" RCP 49.74'

ST48
W 18" RCP 49.67'

ST49
RIM 57.31'
S 24" RCP 48.26'
E 36" RCP 46.85'
W 48" RCP 44.71'

ST50
RIM 57.86'
NW 15" RCP 48.96'

ST51
RIM 57.21'
N 15" RCP 51.39'
SE 15" RCP 51.28'

ST52
RIM 57.36'
S 15" RCP 52.16'

ST53
RIM 55.48'
W 24" RCP 47.34'
E 18" RCP 47.47'

ST54
RIM 55.60'
W 18" RCP 48.31'
E 18" RCP 49.49'

ST55
RIM 57.48'
N 48" RCP 48.16'
S 48" RCP 48.11'
E 24" RCP 49.23'

ST56
RIM 56.95'
E 18" RCP 49.81'
W 24" RCP 49.63'

ST57
RIM 57.82'
W 18" RCP 50.78'
NE 18" RCP 51.001'
SE 18" RCP 52.35'
N 18" RCP 52.65'

ST58
RIM 58.00'
SW 18" RCP 54.61'

ST59
RIM 58.11'
NW 18" RCP 53.66'

ST60
RIM 57.29'
S 18" RCP 53.65'

ST61
RIM 59.17'
S 48" RCP 49.90'
N 36" RCP 50.17'
E 18" RCP 52.00'
W 18" RCP 50.22'

ST62
RIM 58.62'
E 18" RCP 51.99'
W 18" RCP 52.03'

ST63
RIM 59.11'
W 18" RCP 53.36'

ST64
RIM 62.83'
S 36" RCP 53.56'
TOP 12" VCP 56.47'
W 18" RCP 54.36'
N 30" RCP 54.86'

ST65
RIM 63.24'
N 30" RCP 55.59'
S 30" RCP 55.26'
E 46" X 32" RCP 58.22'

ST66
RIM 62.18'
S 30" RCP 55.64'

ST67
W 46" X 32" RCP 59.19'

ST68
RIM 63.35'
N 18" RCP 59.12

ST69
RIM 62.71'
S 18" RCP 58.59'
E 18" RCP 58.25'
W 18" RCP 58.22'

ST70
NE 15" RCP 61.64'

ST71
N 18" RCP 63.95'

ST72
S 18" RCP 64.37'

ST73
N 15" RCP 66.95'

ST74
S 15" RCP 67.94'

ST75
SW 36" RCP 54.77'

ST76
N 24" RCP 54.28'

SR 582 (E FOWLER AVE)

N

0 10 40

Feet

LEGEND

MILLING & RESURFACING

6" THICK SIDEWALK

REMOVE & REPLACE WITH SOD

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

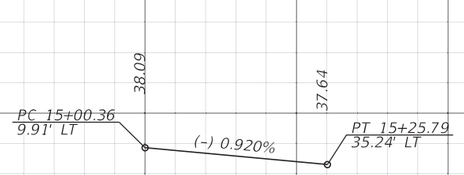
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

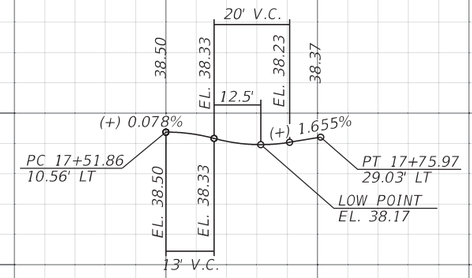
ROADWAY PLANS (15)

SHEET NO. 26



SPECIAL PROFILE 1

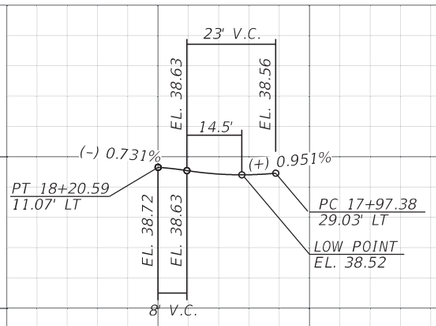
SPECIAL PROFILE 2



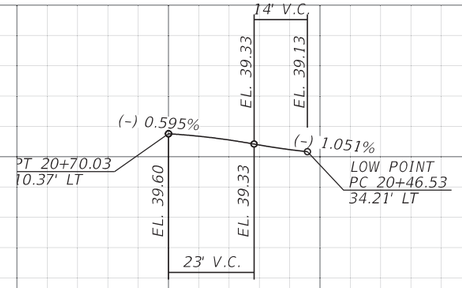
SPECIAL PROFILE 3

1" = 40 Horizontal

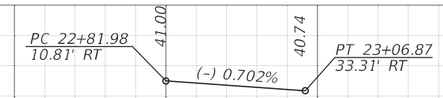
1" = 10' Vertical



SPECIAL PROFILE 4



SPECIAL PROFILE 5



SPECIAL PROFILE 6

1" = 40 Horizontal

1" = 10' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

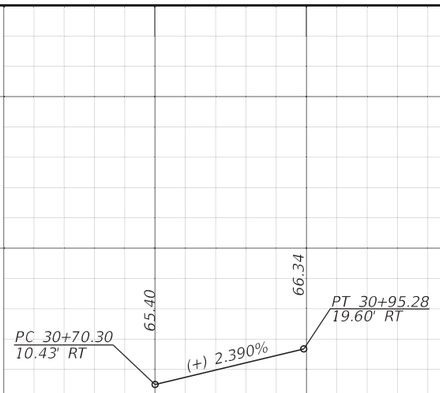
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

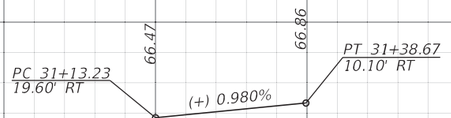
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SPECIAL PROFILES (1)

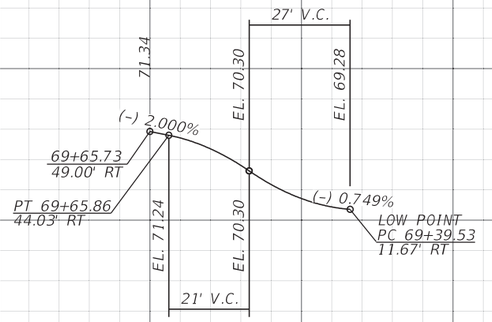
SHEET NO. 27



SPECIAL PROFILE 7

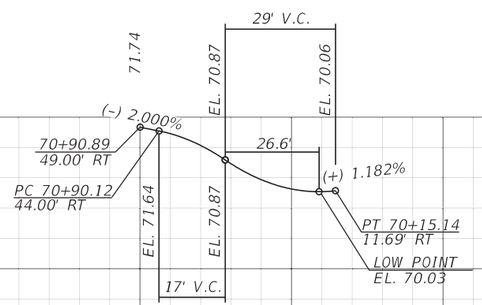


SPECIAL PROFILE 8

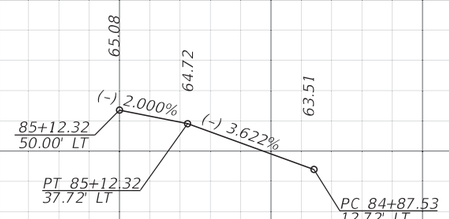


SPECIAL PROFILE 9

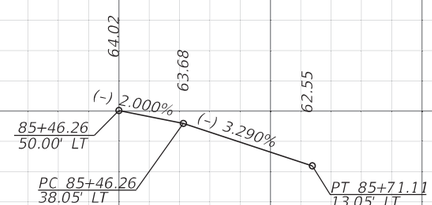
1" = 40 Horizontal
1" = 10' Vertical



SPECIAL PROFILE 10



SPECIAL PROFILE 11



SPECIAL PROFILE 12

1" = 40 Horizontal
1" = 10' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

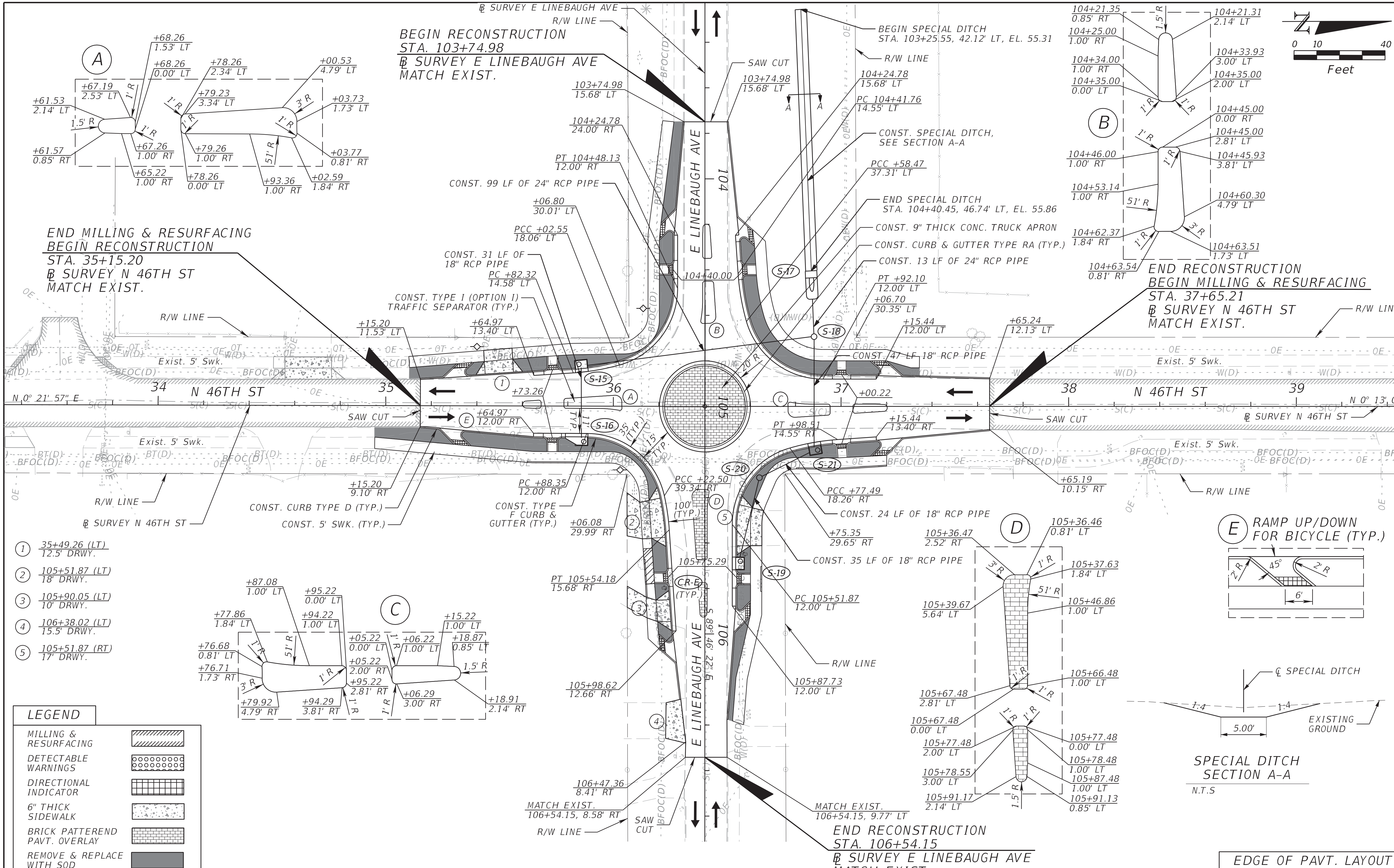
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SPECIAL PROFILES (2)

SHEET NO. 28



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

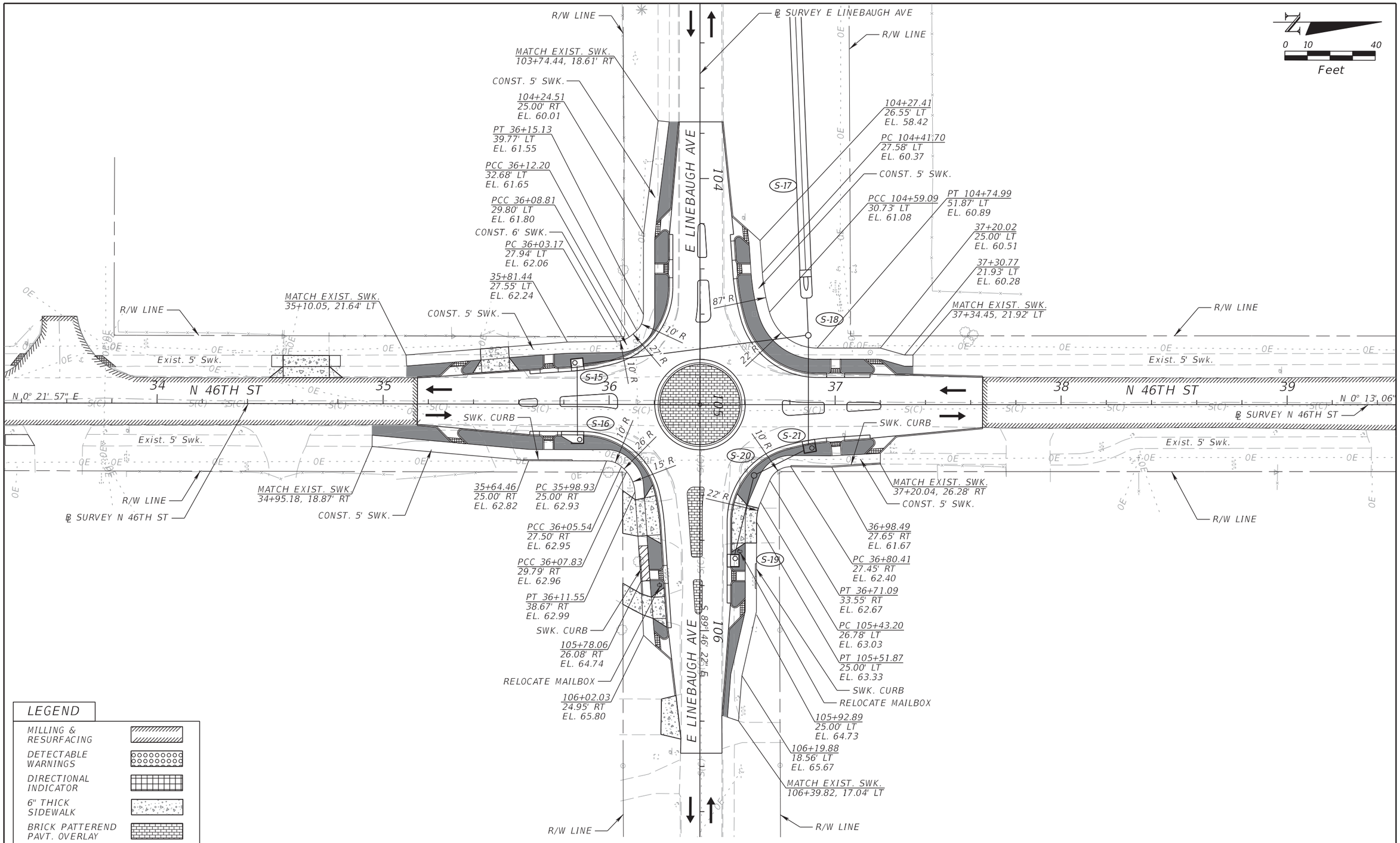
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

INTERSECTION LAYOUT (1)
N 46TH ST & E LINEBAUGH

SHEET NO. 29

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

GebarinM 4/21/2020 6:35:21 PM Default L:\67026100 N 46th Street City of Tampa\43724615801\roadway\INTDRD01.dgn



LEGEND

- MILLING & RESURFACING
- DETECTABLE WARNINGS
- DIRECTIONAL INDICATOR
- 6" THICK SIDEWALK
- BRICK PATTEREND PAVT. OVERLAY
- REMOVE & REPLACE WITH SOD

BACK OF SWK. LAYOUT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

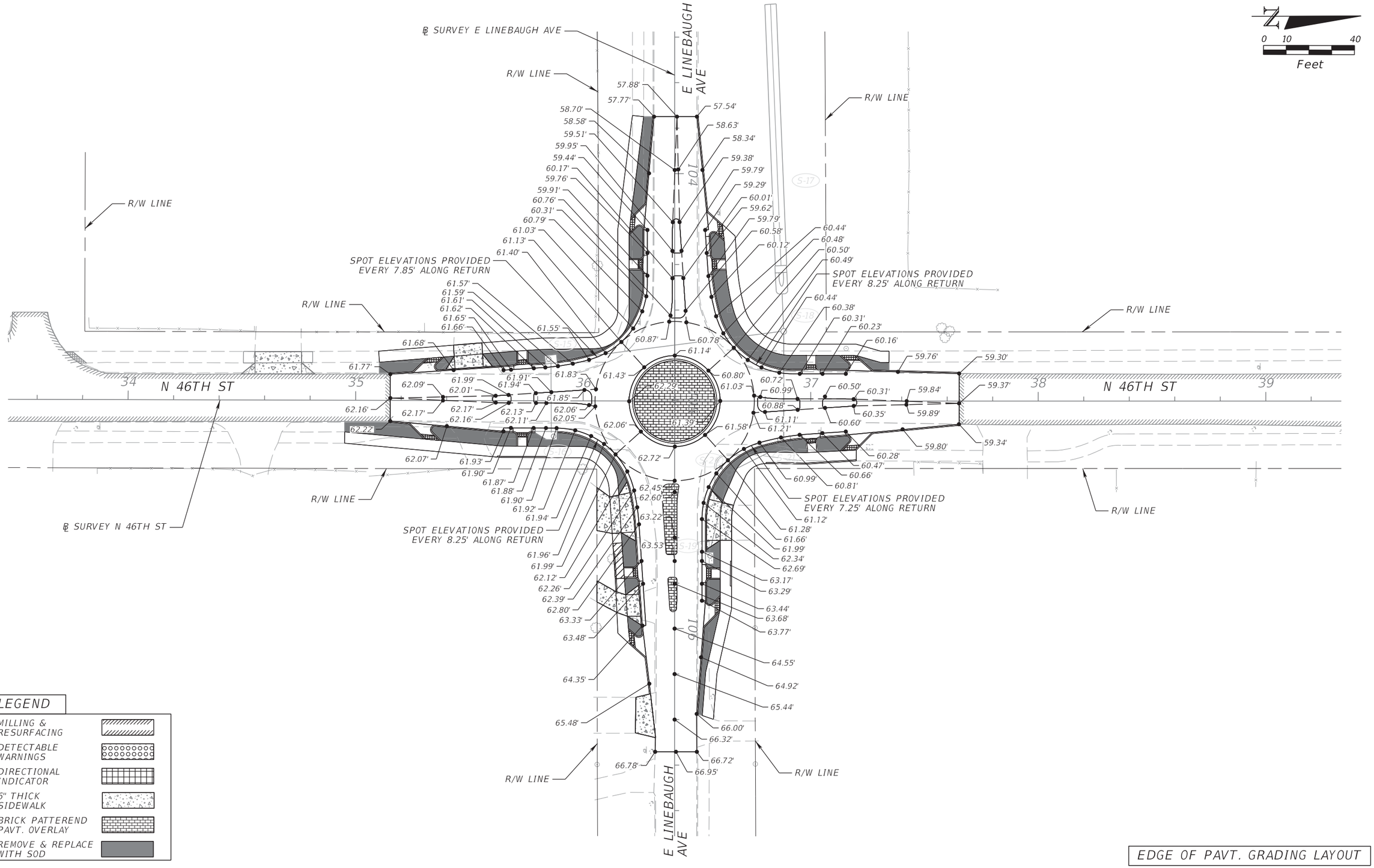
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

INTERSECTION LAYOUT (2)
N 46TH ST & E LINEBAUGH

SHEET NO. 30



LEGEND

- MILLING & RESURFACING
- DETECTABLE WARNINGS
- DIRECTIONAL INDICATOR
- 6" THICK SIDEWALK
- BRICK PATTEREND PAVT. OVERLAY
- REMOVE & REPLACE WITH SOD

EDGE OF PAVT. GRADING LAYOUT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

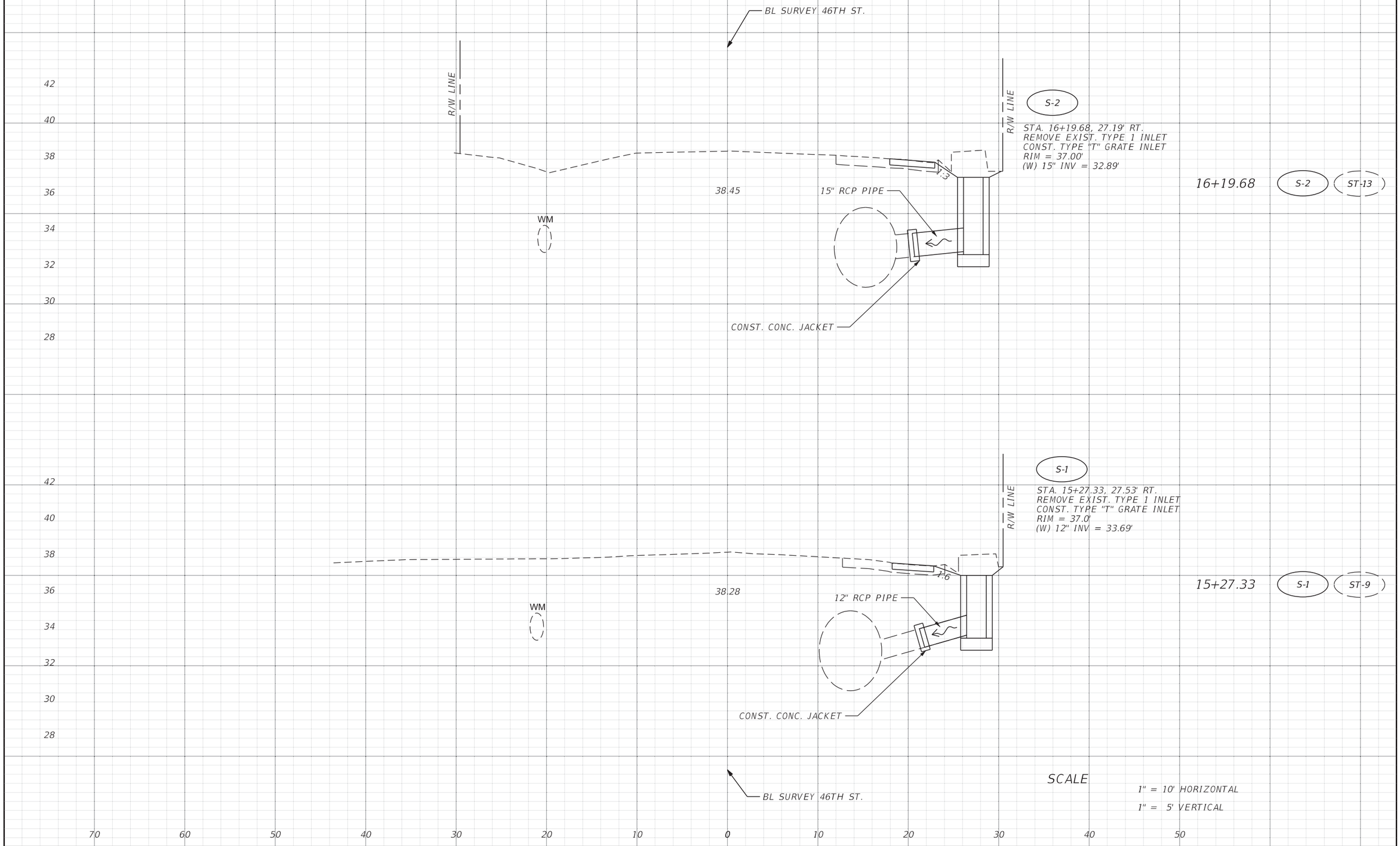
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

INTERSECTION DETAIL
N 46TH ST & E LINEBAUGH

SHEET NO. 31



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (1)

SHEET NO. 32

REMOVE (N) 15" PIPE & MES
REPLACE WITH 18" PIPE

BL SURVEY 46TH ST.

S-5

STA. 18+10.32, 18.27' LT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET W/
J BOTTOM (4'X8')
RIM = 38.30'
(N) 18" INV = 35.36'
(S) 18" INV = 35.26'

FROM S-6

18" RCP PIPE

1:4

1:14

R/W LINE

38.84

WM

CONST. CONC. JACKET

18" RCP PIPE

EXIST. 18" PIPE

TO S-3

18+10.32 S-5 ST-19

42
40
38
36
34
32
30

S-3

STA. 17+67.76, 25.30' LT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET
RIM = 37.50'
(N) 18" INV = 34.16'
(E) 24" INV = 34.28'

FROM S-5

EXIST. 18" PIPE

CONST. CONC. JACKET

18" RCP PIPE

1:100

1:3

1:8

R/W LINE

S-4

STA. 17+70.64, 25.58' RT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET
RIM = 37.50'
(W) 15" INV = 35.00'

S-4 ST-17
ST-16
S-3 ST-15

17+67.76
17+70.64

WM

EX. 24" PIPE

CONST. CONC. JACKET

24" RCP PIPE

15" RCP PIPE

42
40
38
36
34
32
30
28

BL SURVEY 46TH ST.

SCALE
1" = 10' HORIZONTAL
1" = 5' VERTICAL

70 60 50 40 30 20 10 0 10 20 30 40 50

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

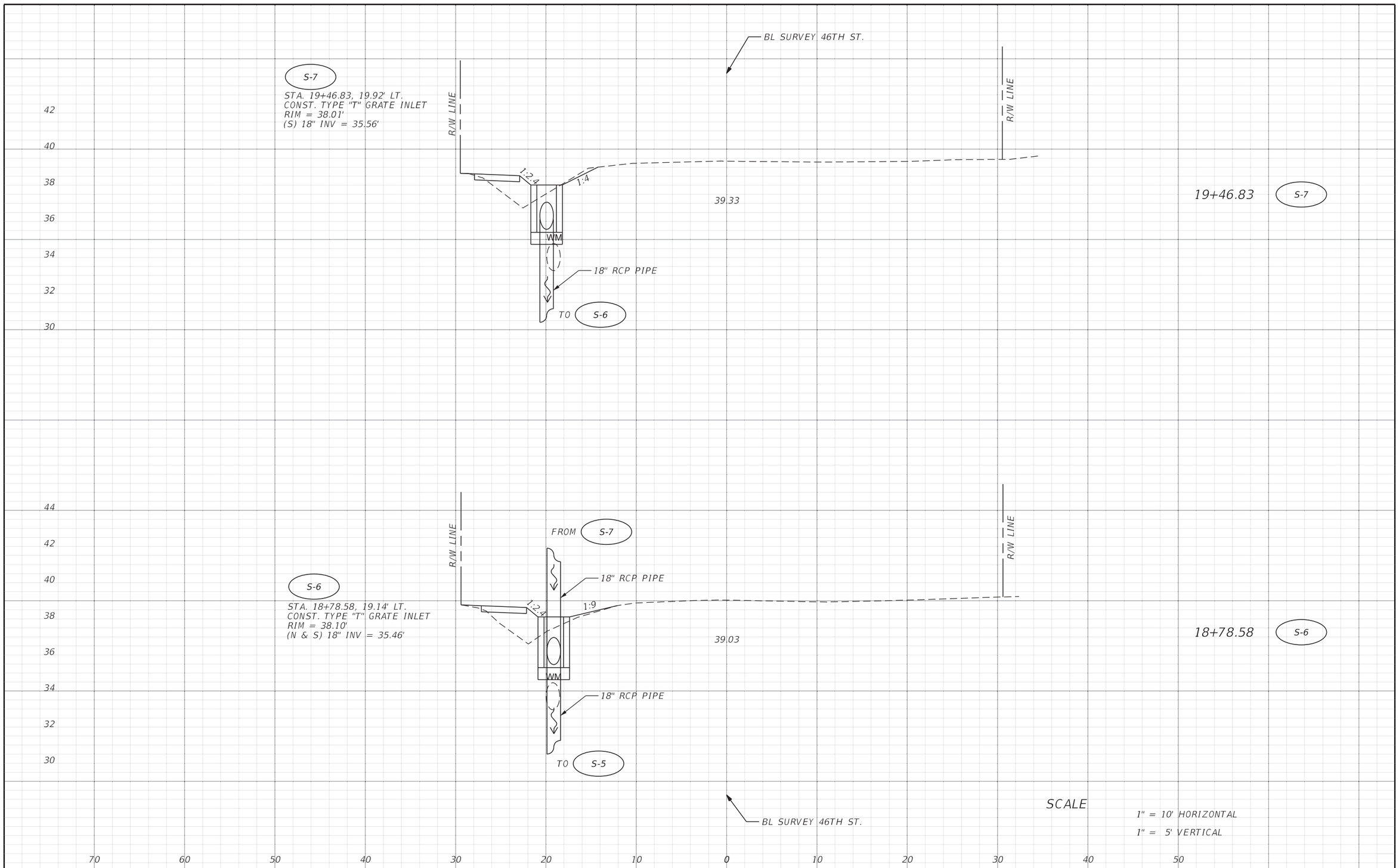
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (2)

SHEET NO. 33



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

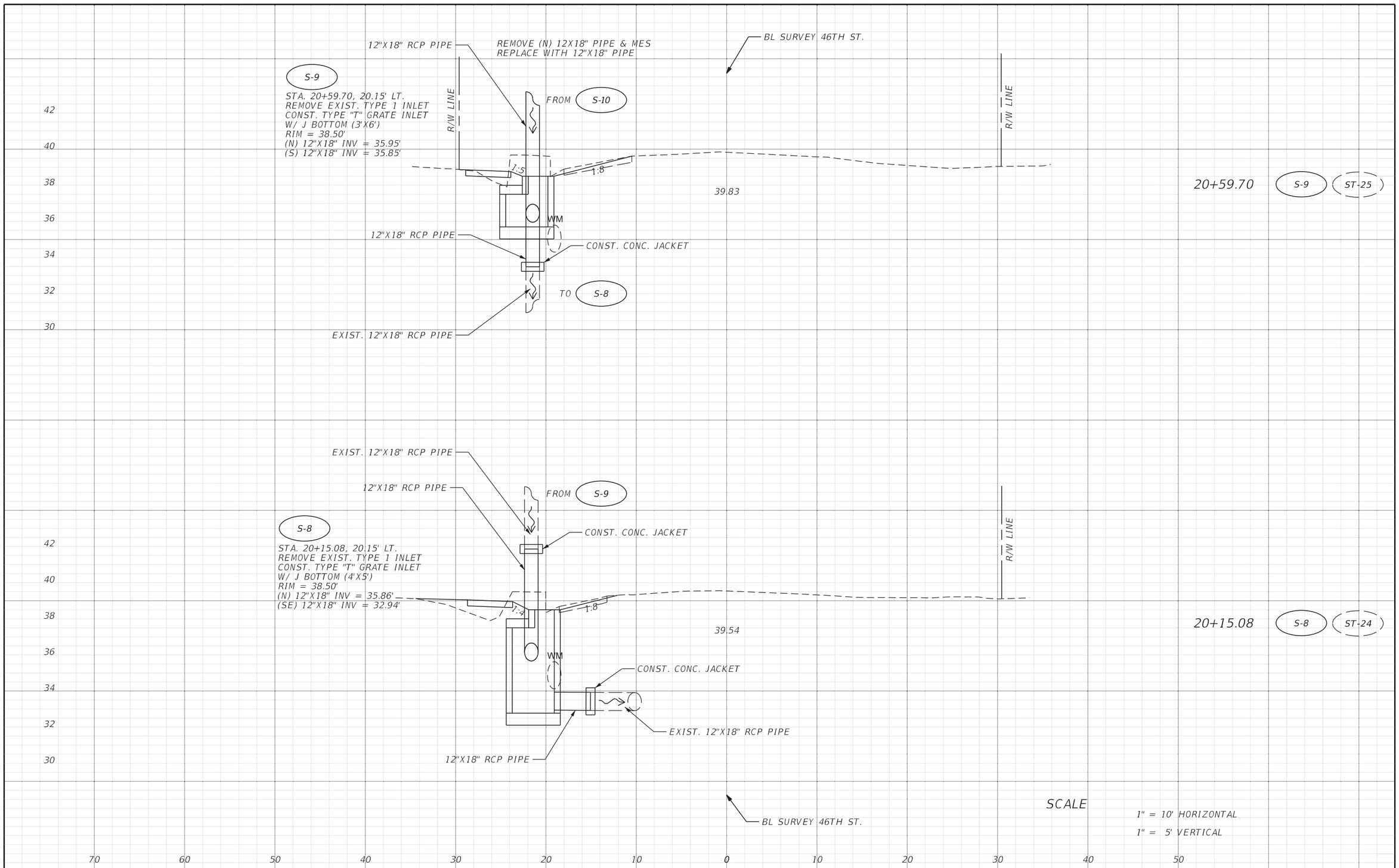
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (3)

SHEET NO. 34



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

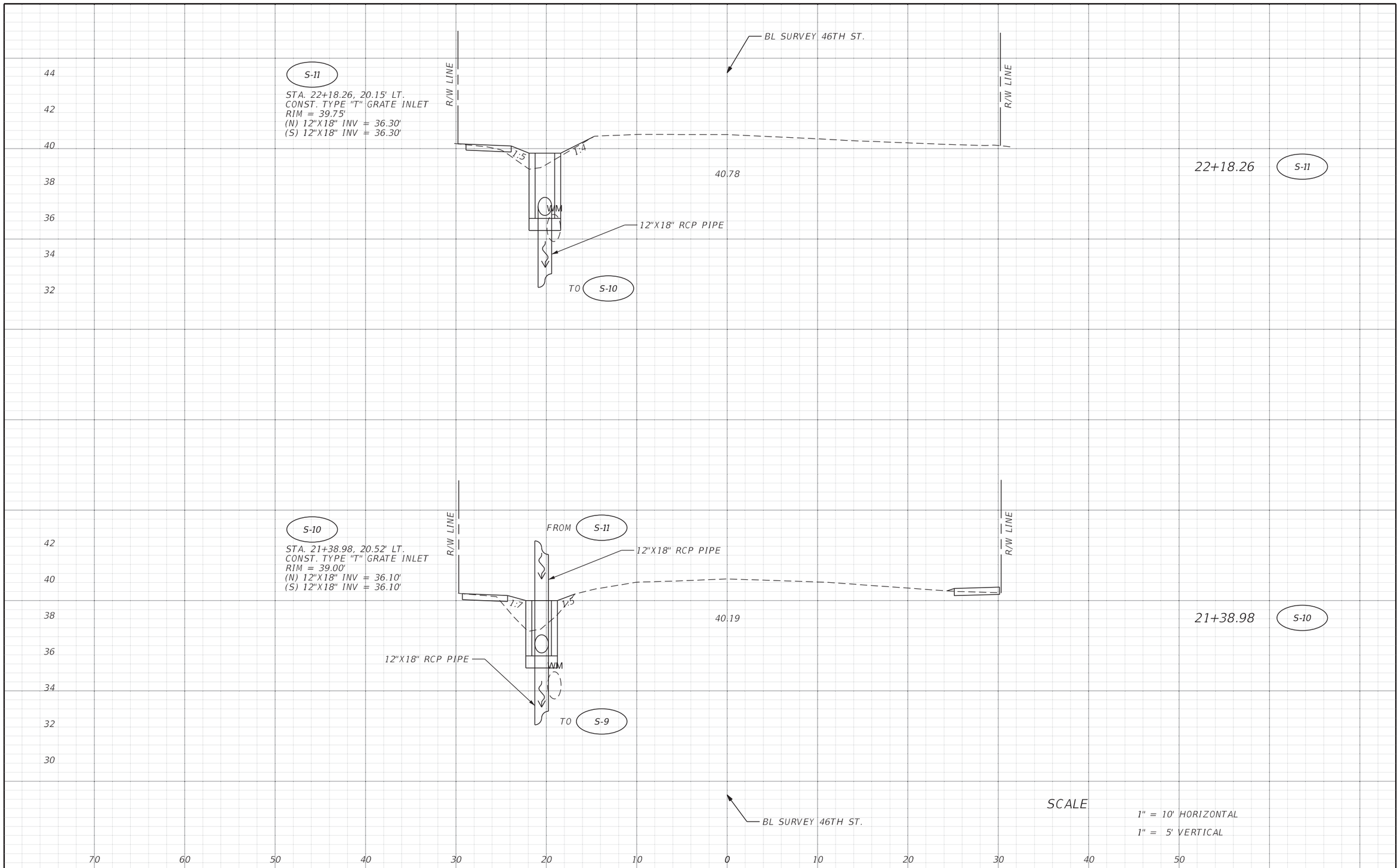
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (4)

SHEET NO. 35



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (5)

SHEET NO. 36

BL SURVEY 46TH ST.

S-13

STA. 23+40.43, 21.46' RT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET
W/ J-BOTTOM (4'X6')
RIM = 41.00'
(S) 19"X30" INV = 36.06'

23+40.43 S-13 ST-35

1:17 1:3

41.76

WM

EXIST. 19"X30" RCP PIPE

19"X30" RCP PIPE

TO ST-32

FROM S-14

EXIST. 12"X18" RCP PIPE

FROM S-13

S-12

STA. 22+97.54, 19.81' LT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET
W/ J-BOTTOM (4'X6')
RIM = 40.50'
(N) 12"X18" INV = 35.85'
(NE) 12"X18" INV = 35.86'

12"X18" RCP PIPE

EXIST. 19"X30" RCP PIPE

ST-32

22+97.54 S-12 ST-33 ST-32

1:3 1:7

41.47

WM

12"X18" RCP PIPE

CONST. CONC. JACKET

WM

EXIST. 36" RCP PIPE

EXIST. 12"X18" RCP PIPE

EXIST. 48" RCP PIPE

BL SURVEY 46TH ST.

SCALE

1" = 10' HORIZONTAL

1" = 5' VERTICAL

44 42 40 38 36 34 32 30

70 60 50 40 30 20 10 0 10 20 30 40 50

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

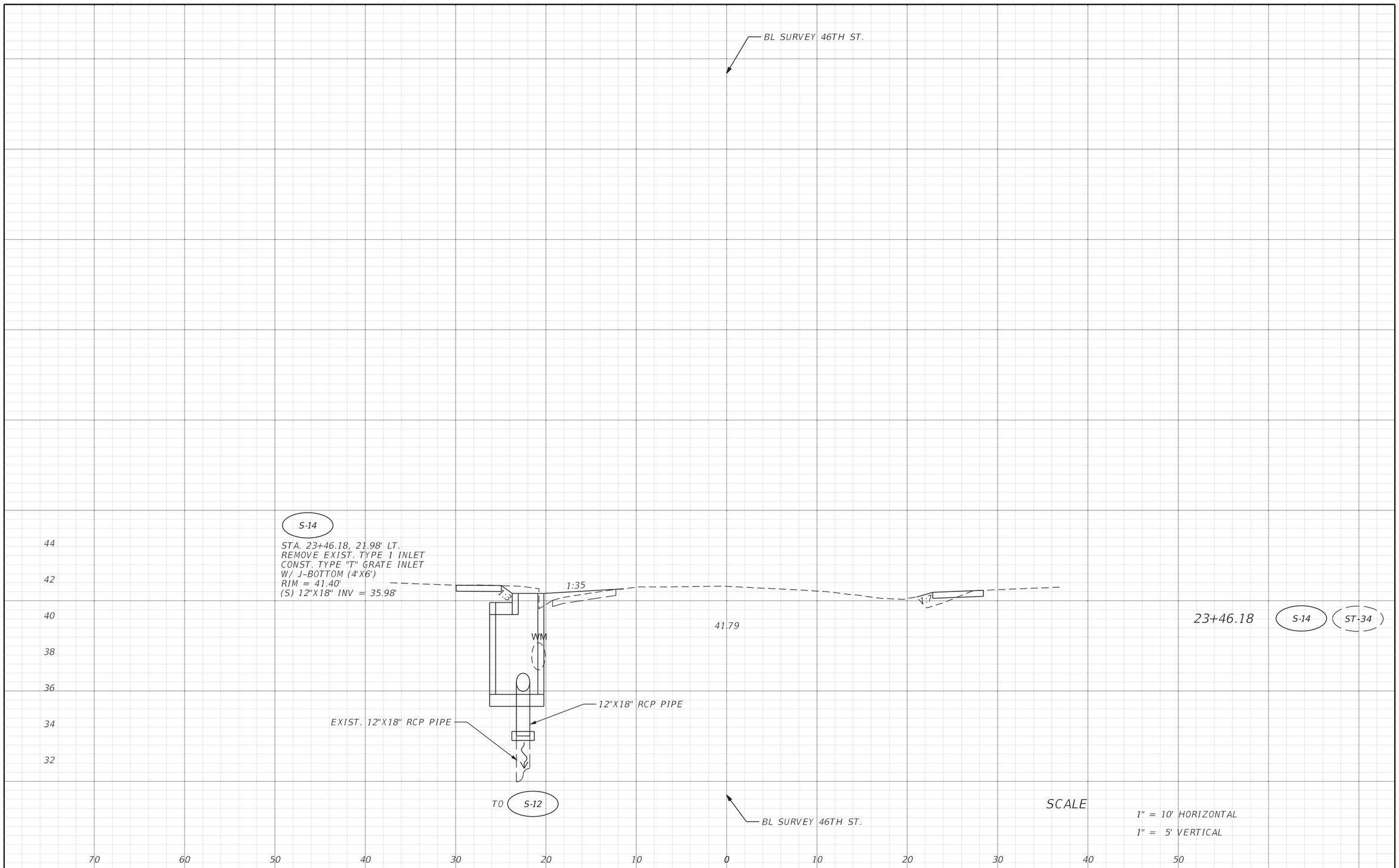
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (6)

SHEET NO. 37



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

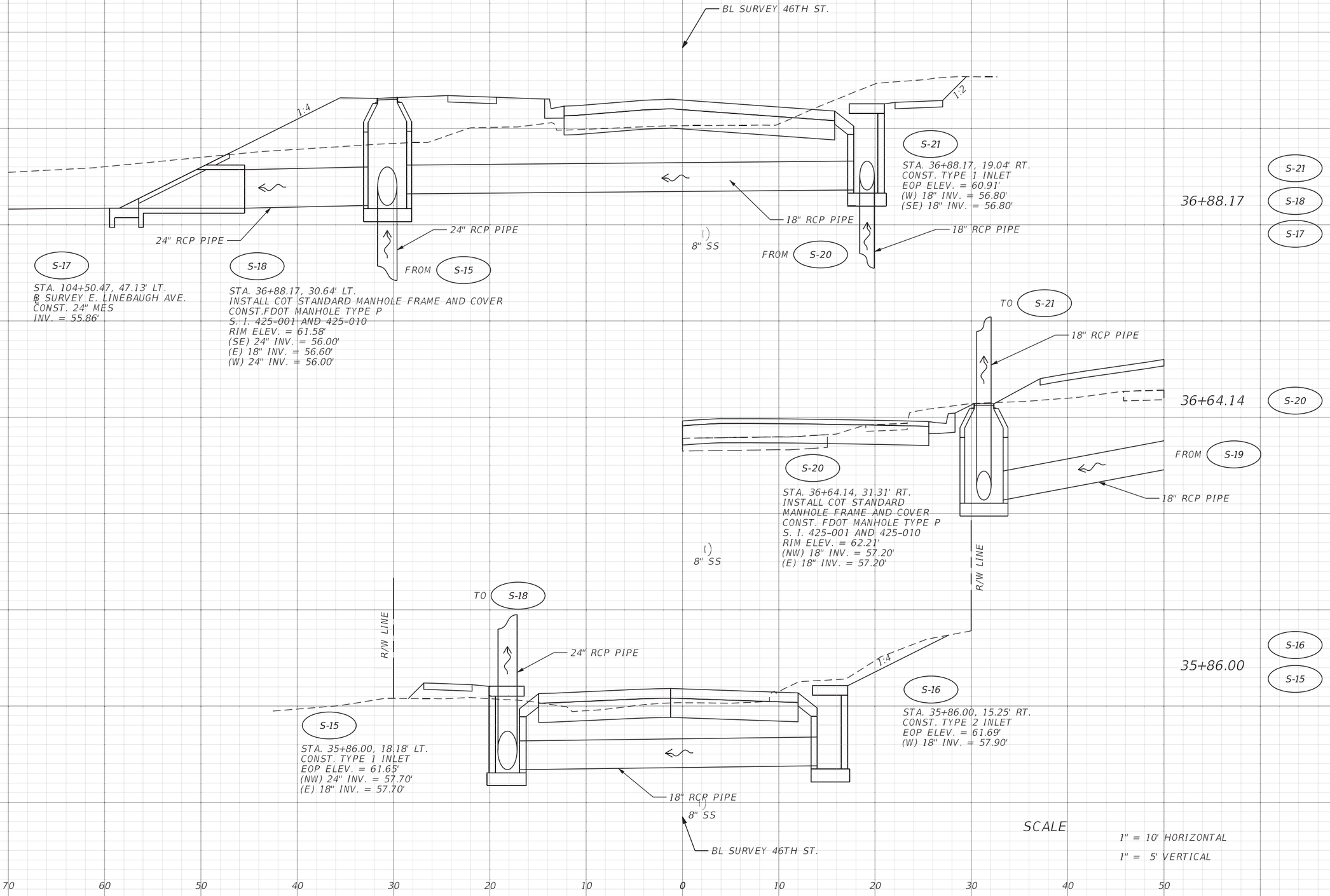
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (7)

SHEET NO. 38



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (8)

SHEET NO. 39

BL SURVEY LINEBAUGH AVE.

68
66
64
62
60
58
56
54

R/W LINE

S-19

STA. 105+69.00, 15.25' LT.
℄ SURVEY E. LINEBAUGH AVE.
CONST. TYPE 1 INLET
EOP ELEV. = 63.11'
(W) 18" INV. = 59.60'

1:6

1:6

18" RCP PIPE

TO S-21

105+69.00 S-19

BL SURVEY LINEBAUGH AVE.

SCALE
1" = 10' HORIZONTAL
1" = 5' VERTICAL

70 60 50 40 30 20 10 0 10 20 30 40 50

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

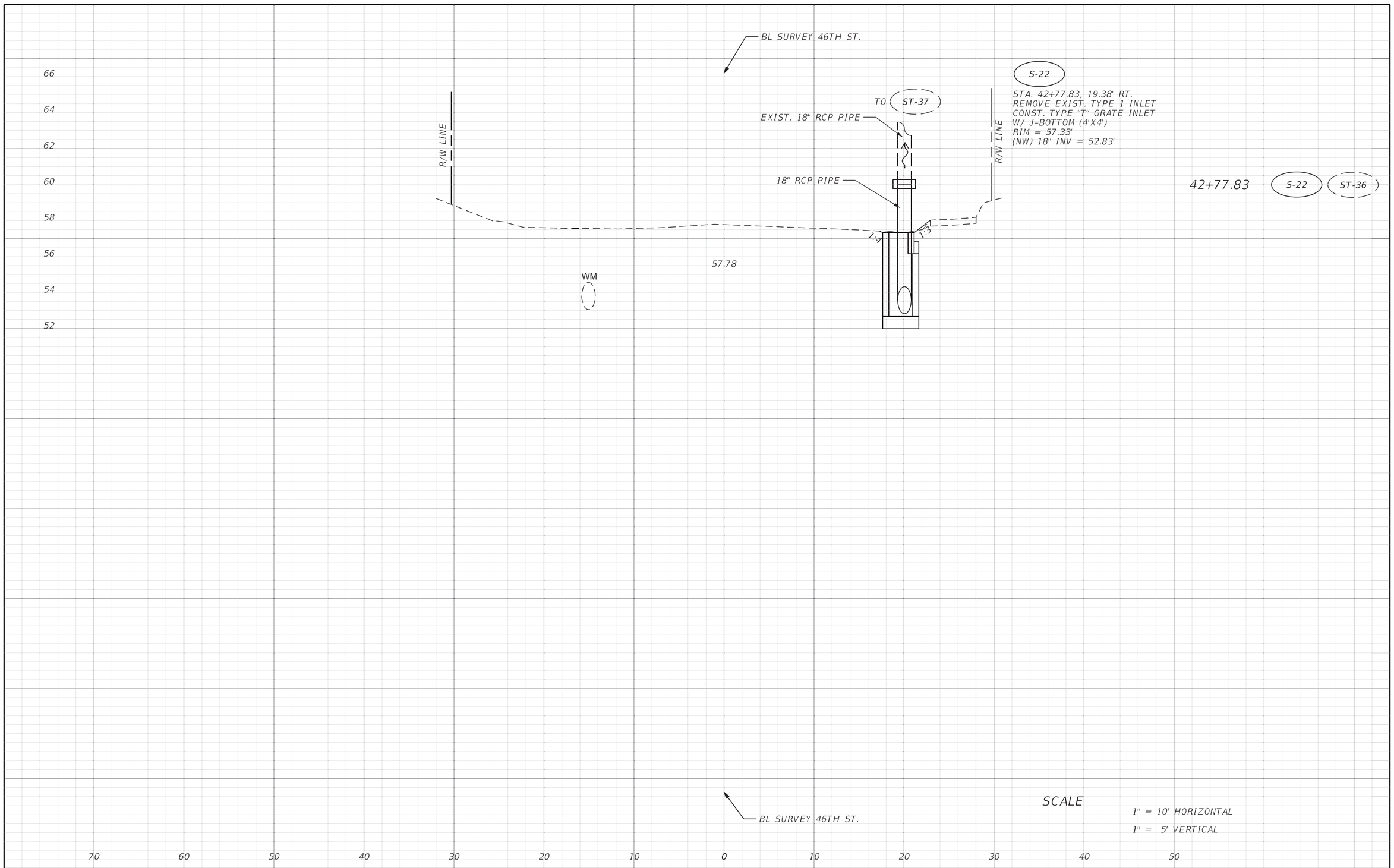
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (9)

SHEET NO. 40



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

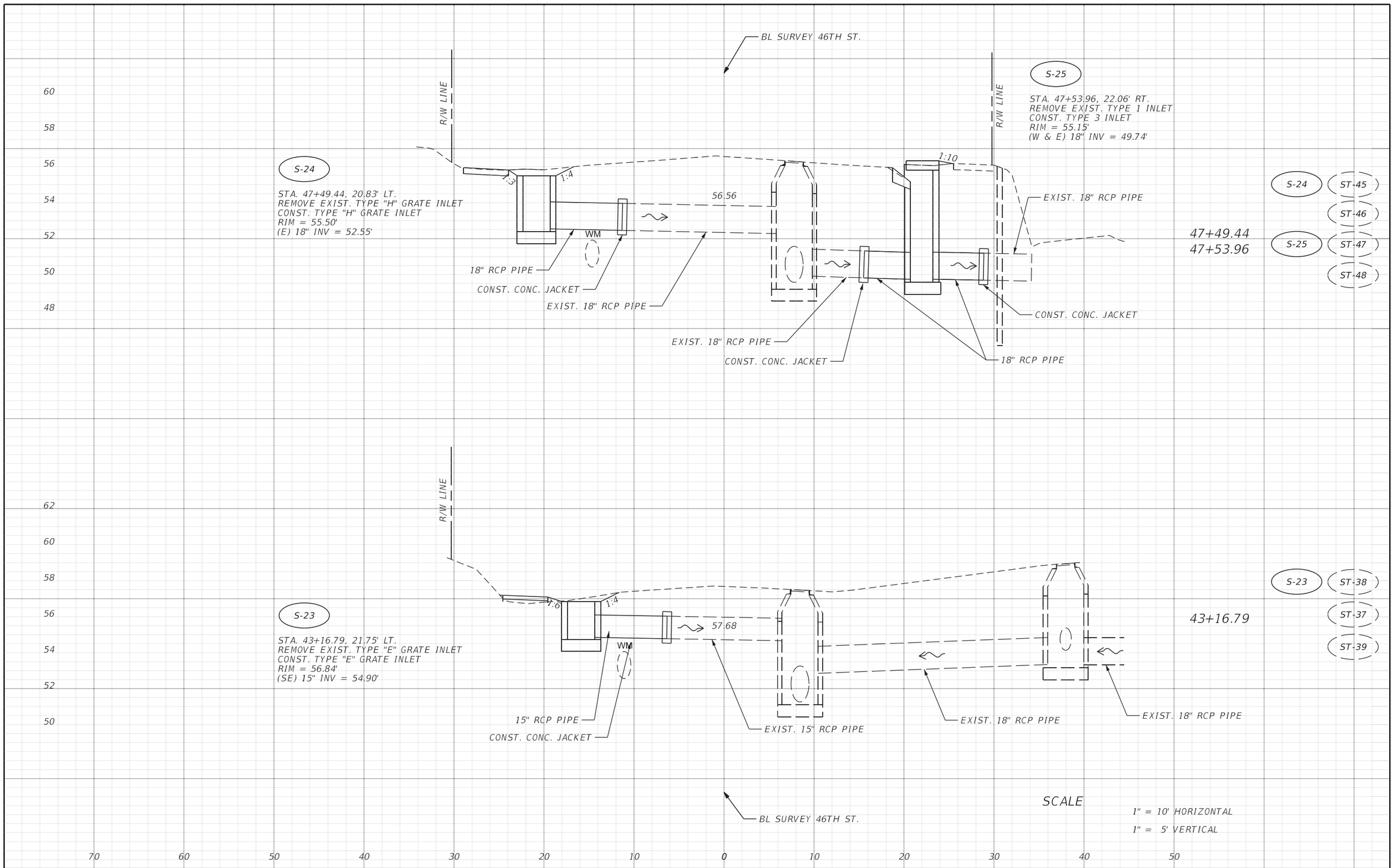
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (10)

SHEET NO. 41



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

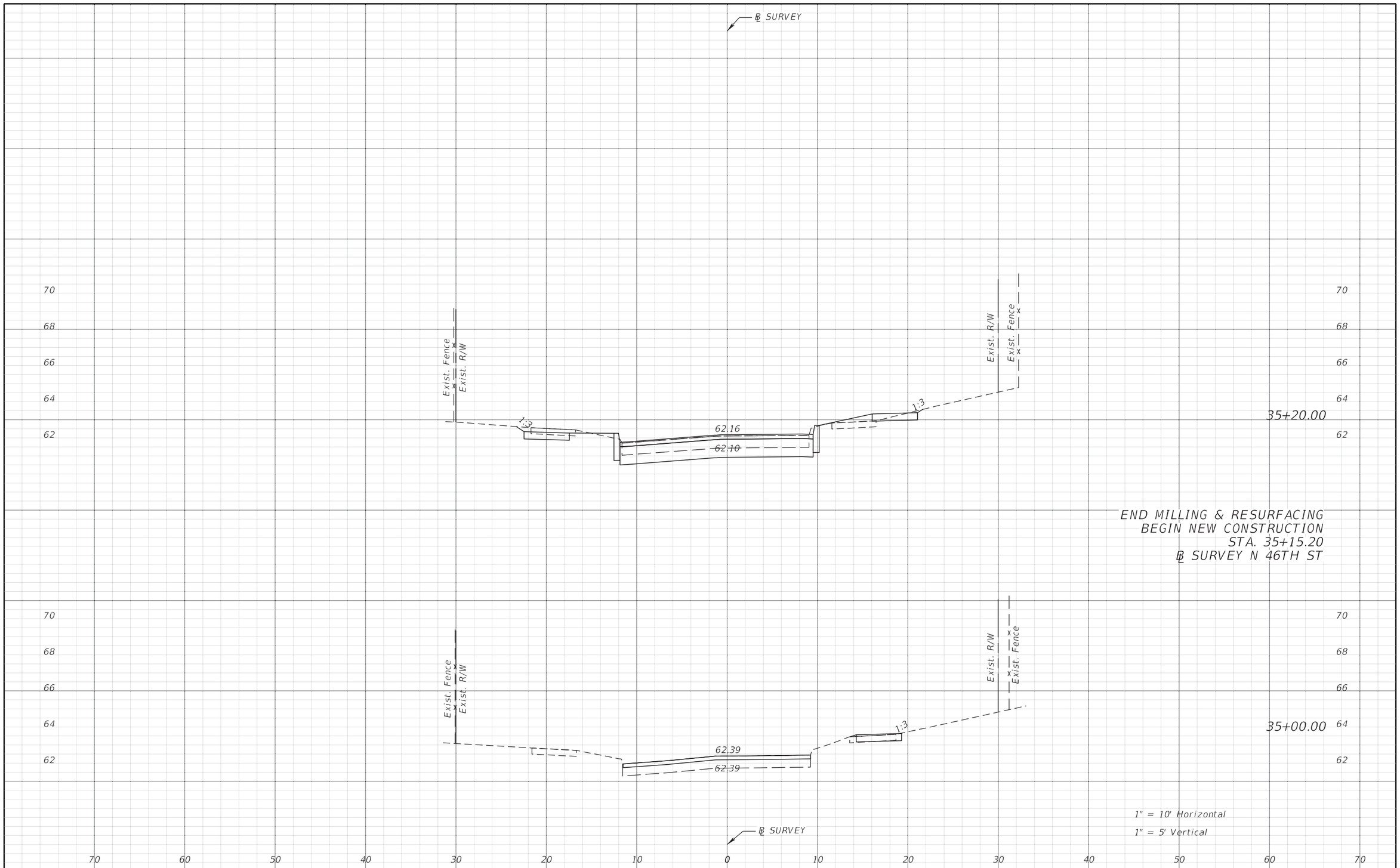
THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

DRAINAGE STRUCTURES (11)

SHEET NO. 42



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

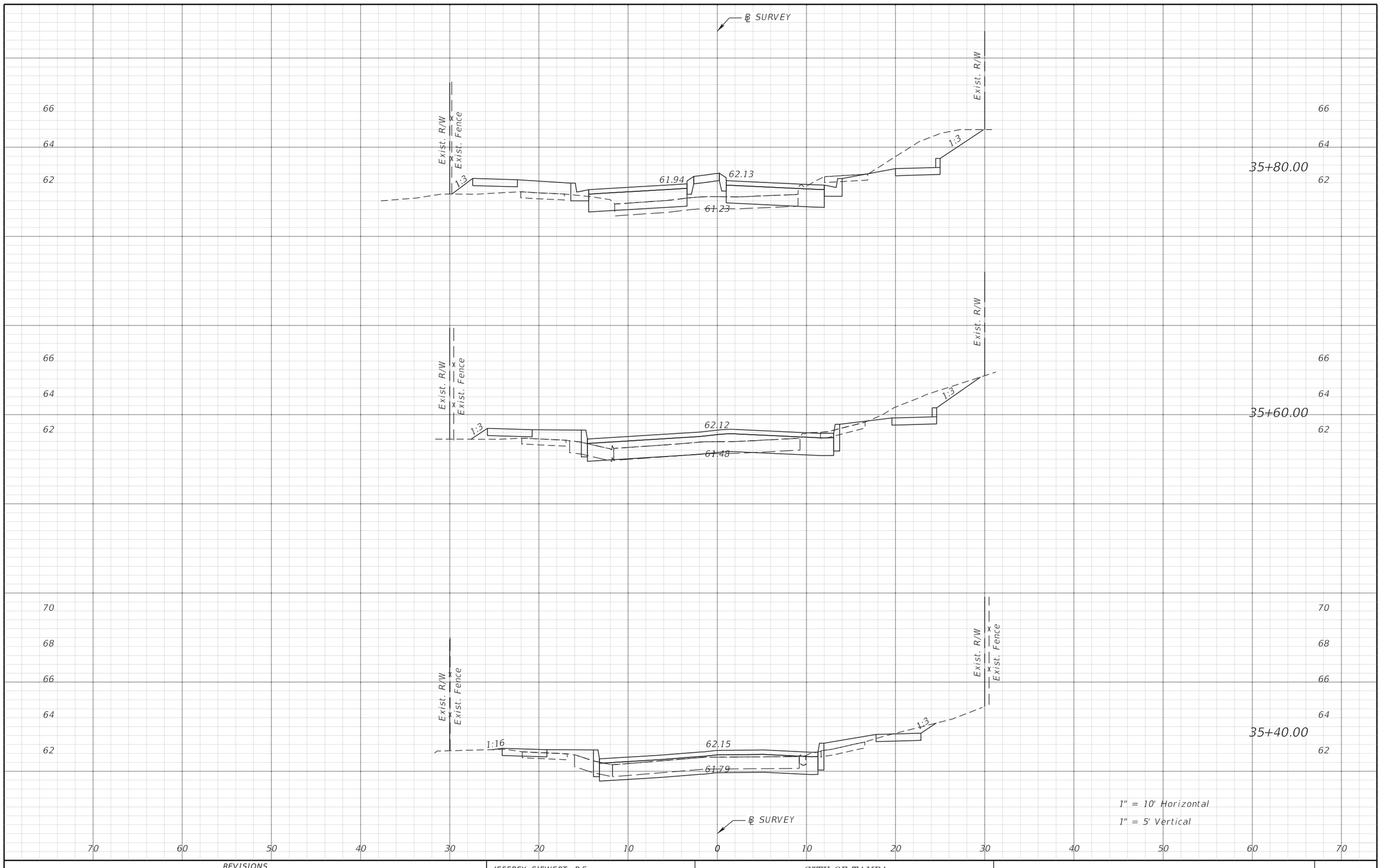
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
N 46TH ST

SHEET NO. 43



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

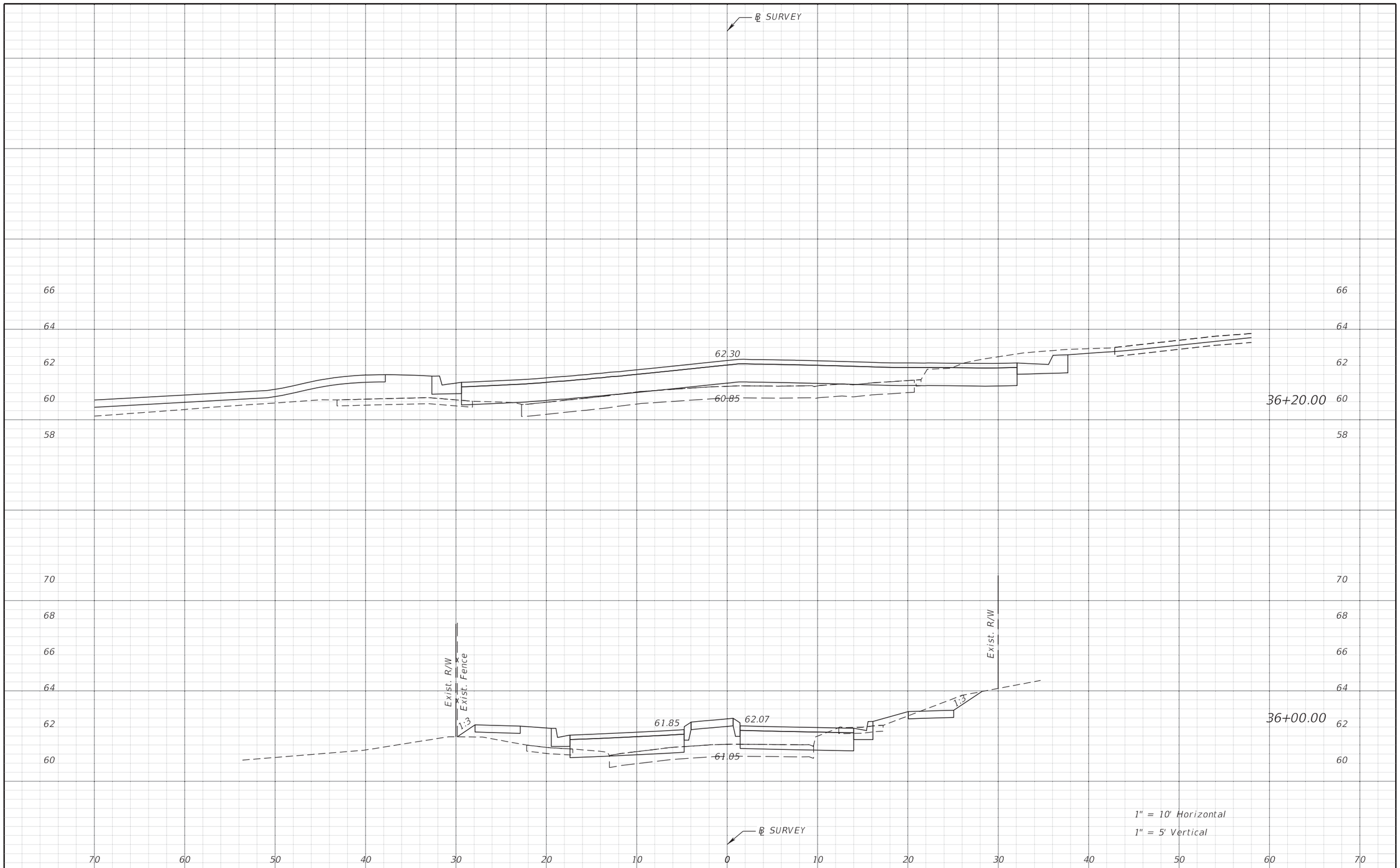
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
N 46TH ST

SHEET NO. 44



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

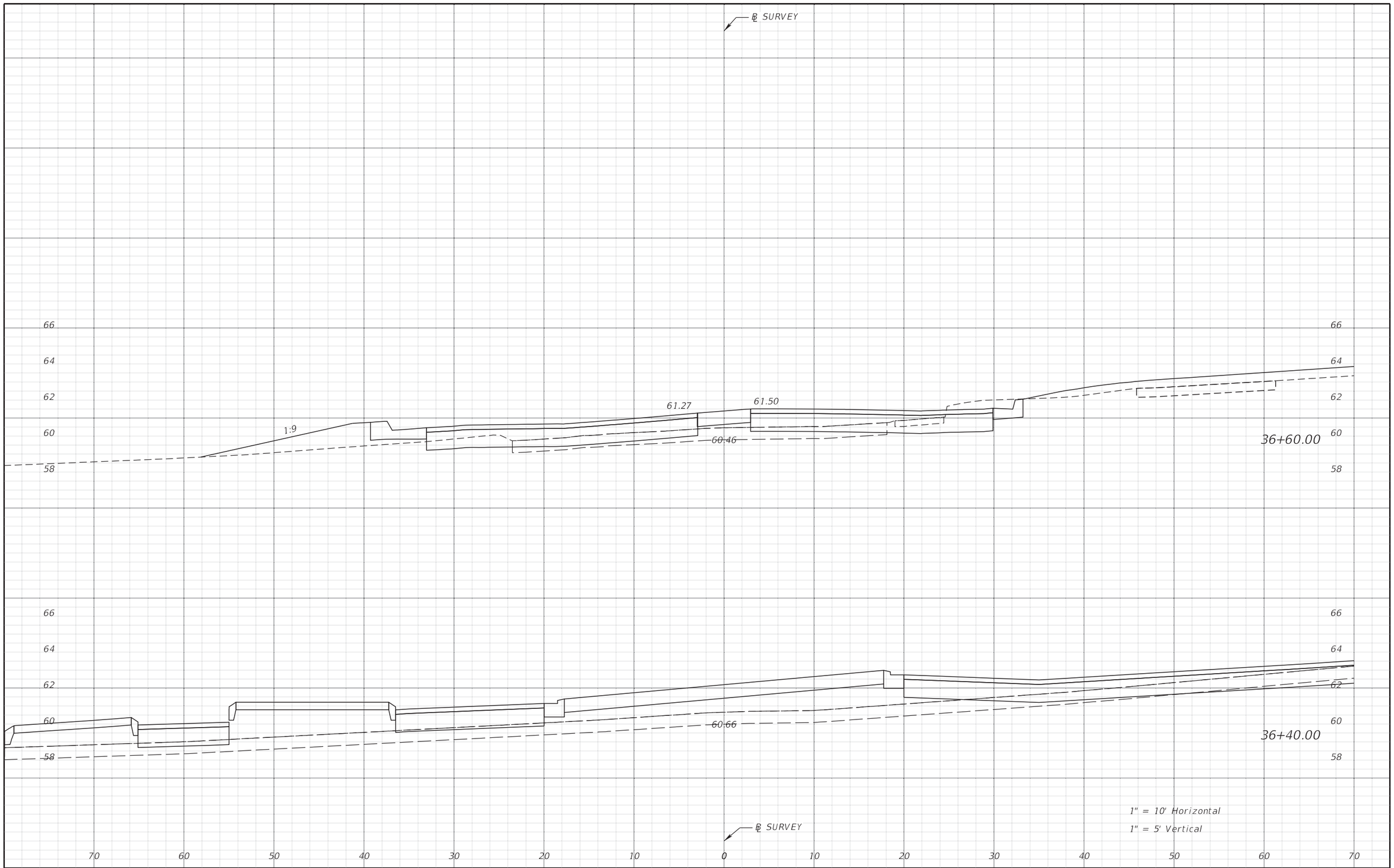
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
N 46TH ST

SHEET NO. 45



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

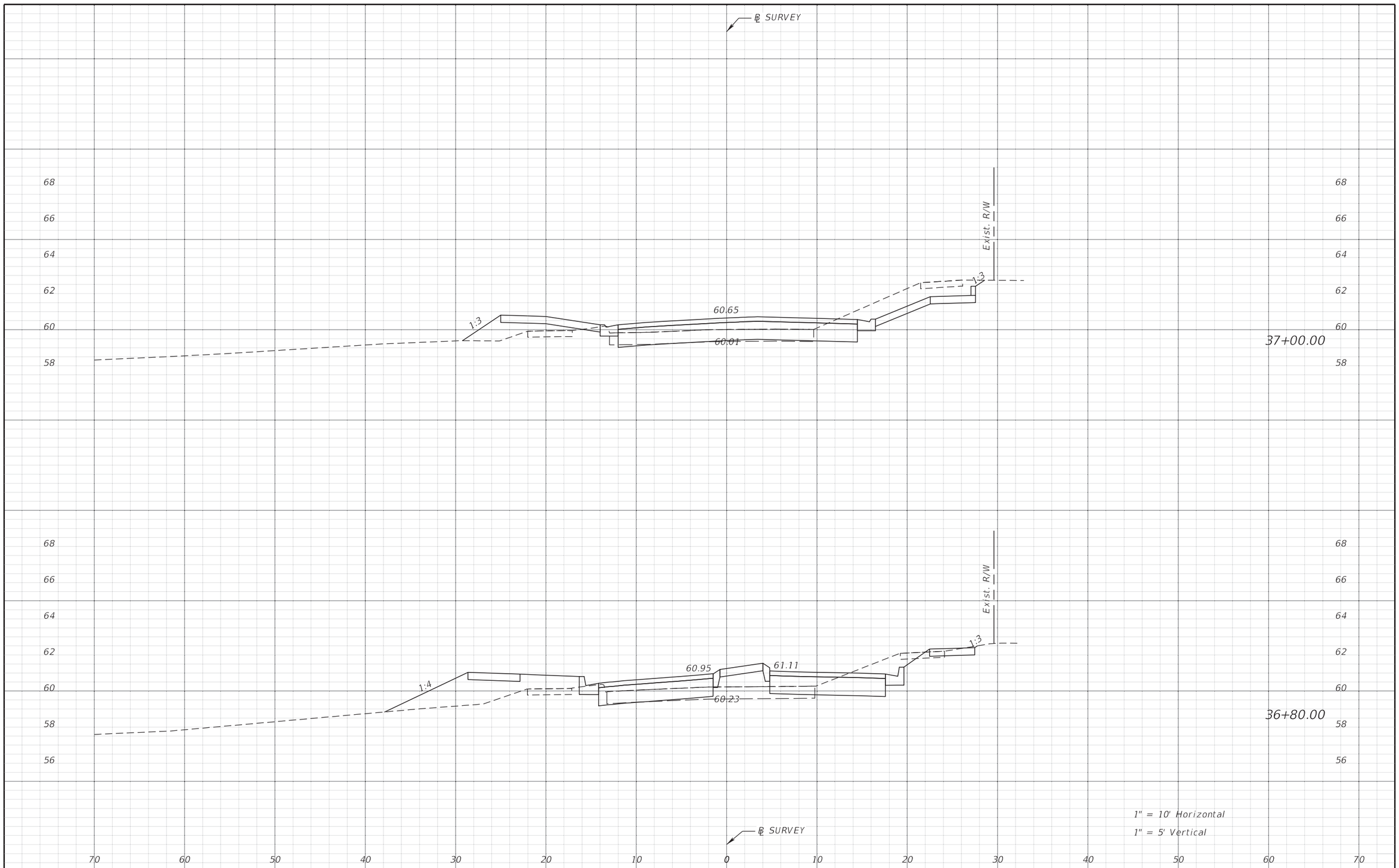
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
N 46TH ST

SHEET NO. 46

GebarinM 4/21/2020 6:39:27 PM Rdxsrd_shg L:\67026100 N 46th Street City of Tampa\4372461580l\roadway\RDXSRD01.dgn



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

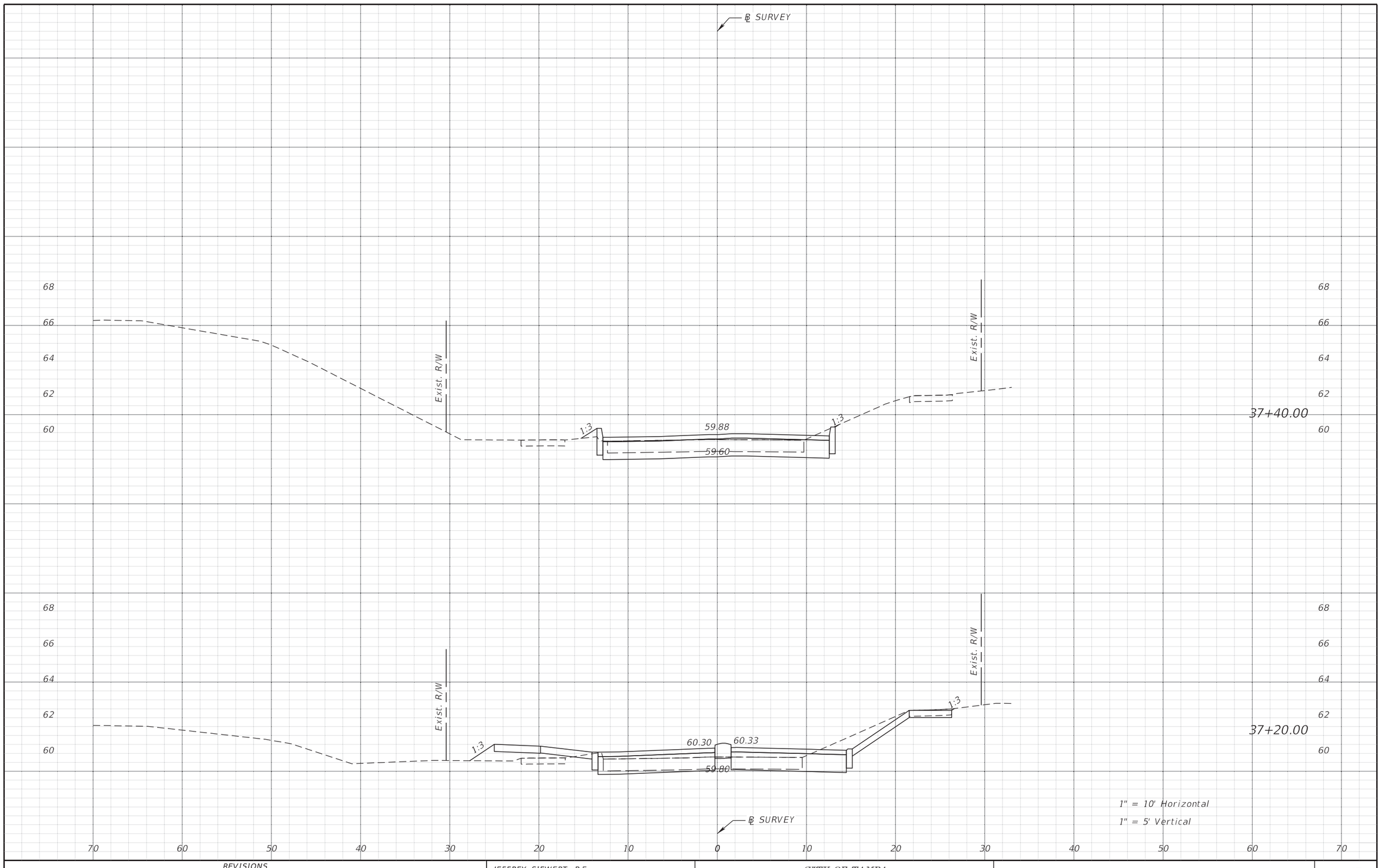
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
N 46TH ST

SHEET NO. 47



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

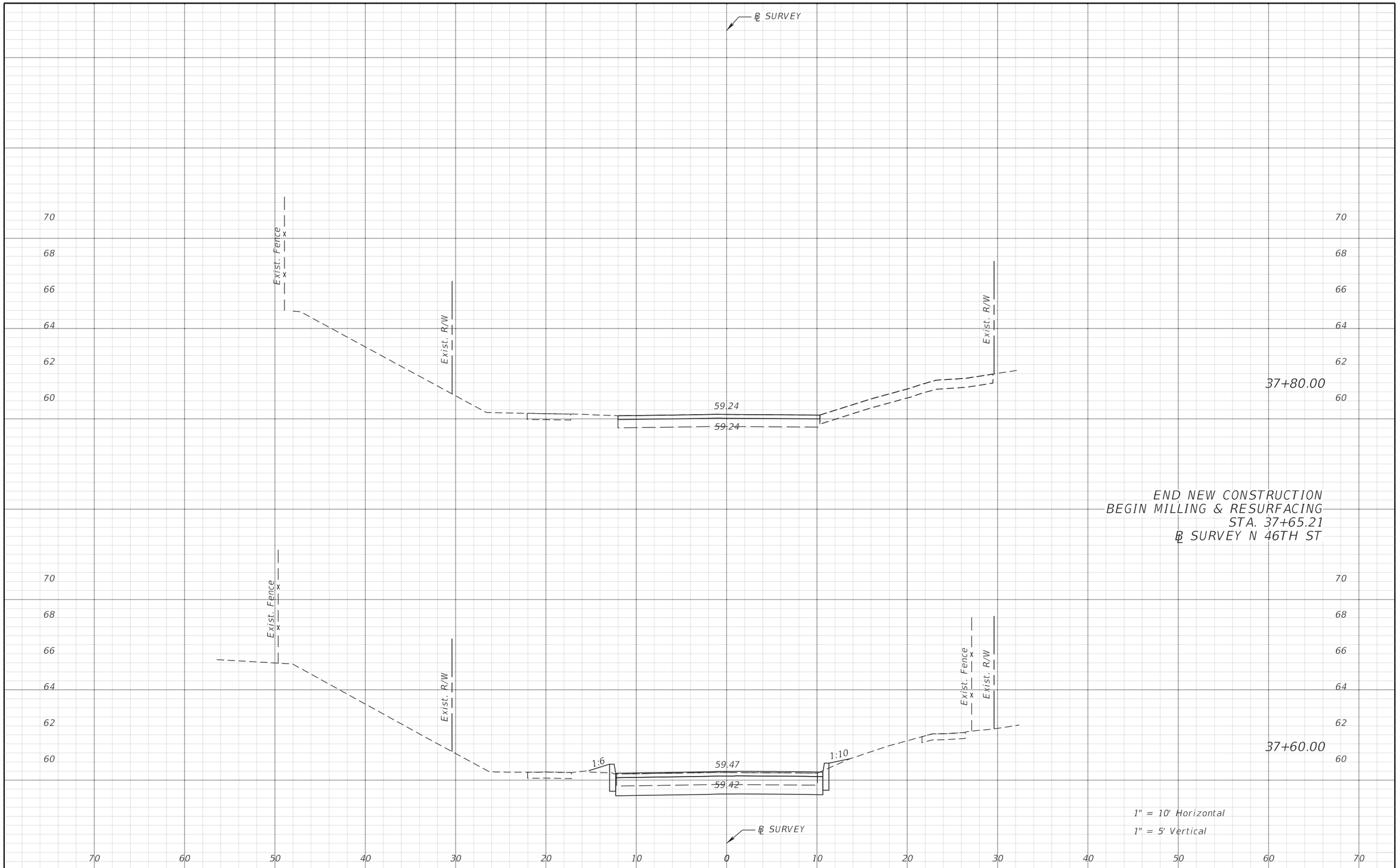
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
N 46TH ST

SHEET NO. 48



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
N 46TH ST

SHEET NO. 49

℄ SURVEY

64
62
60
58

Exist. R/W

1:3

58.76

58.35

Exist. Fence

104+00.00

103+80.00

58.07

57.97

BEGIN RECONSTRUCTION
STA. 103+74.98
℄ SURVEY E LINEBAUGH AVE
MATCH EXIST.

103+60.00

57.60

℄ SURVEY

1" = 10' Horizontal
1" = 5' Vertical

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

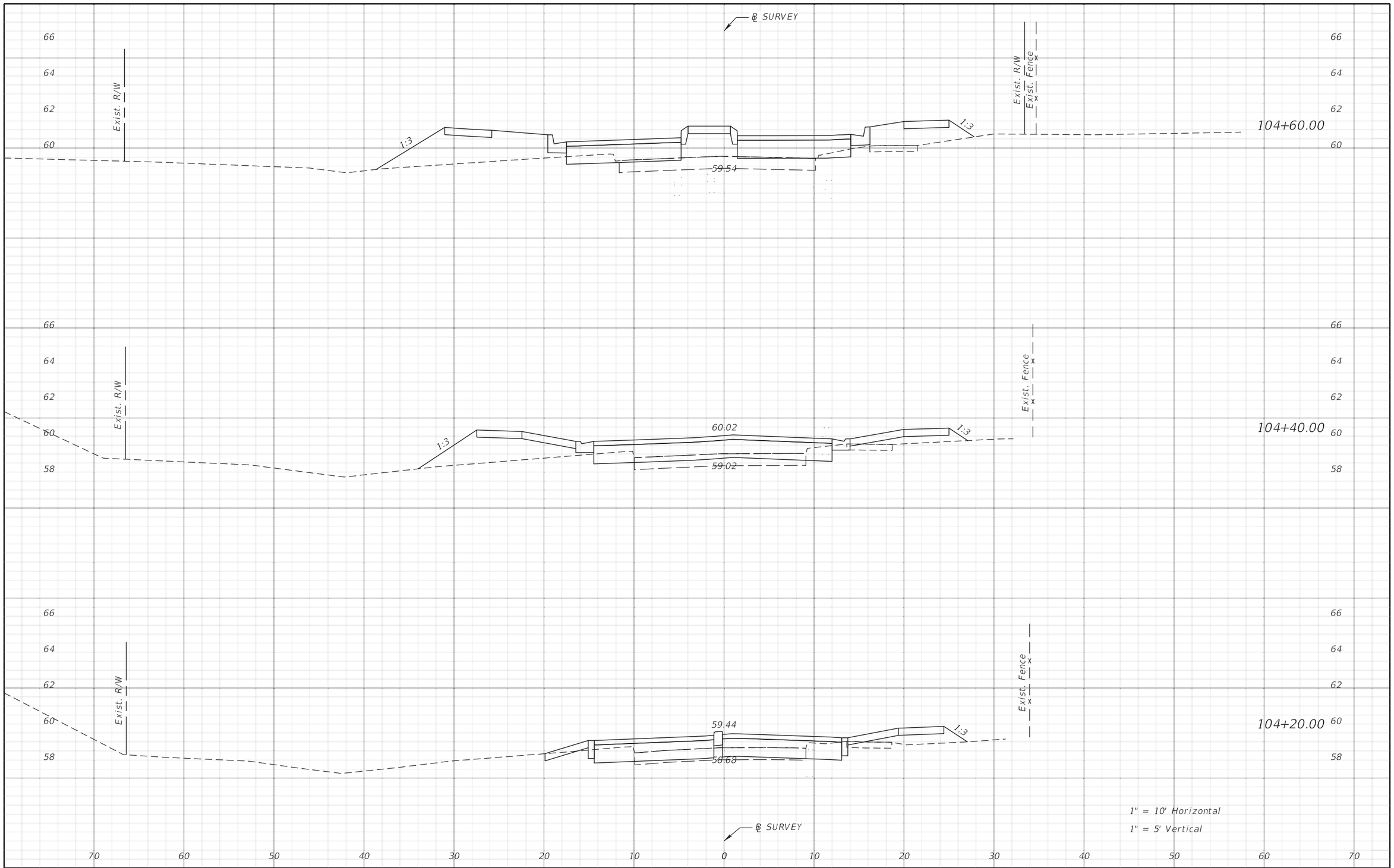
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
E LINEBAUGH AVE

SHEET NO. 50



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

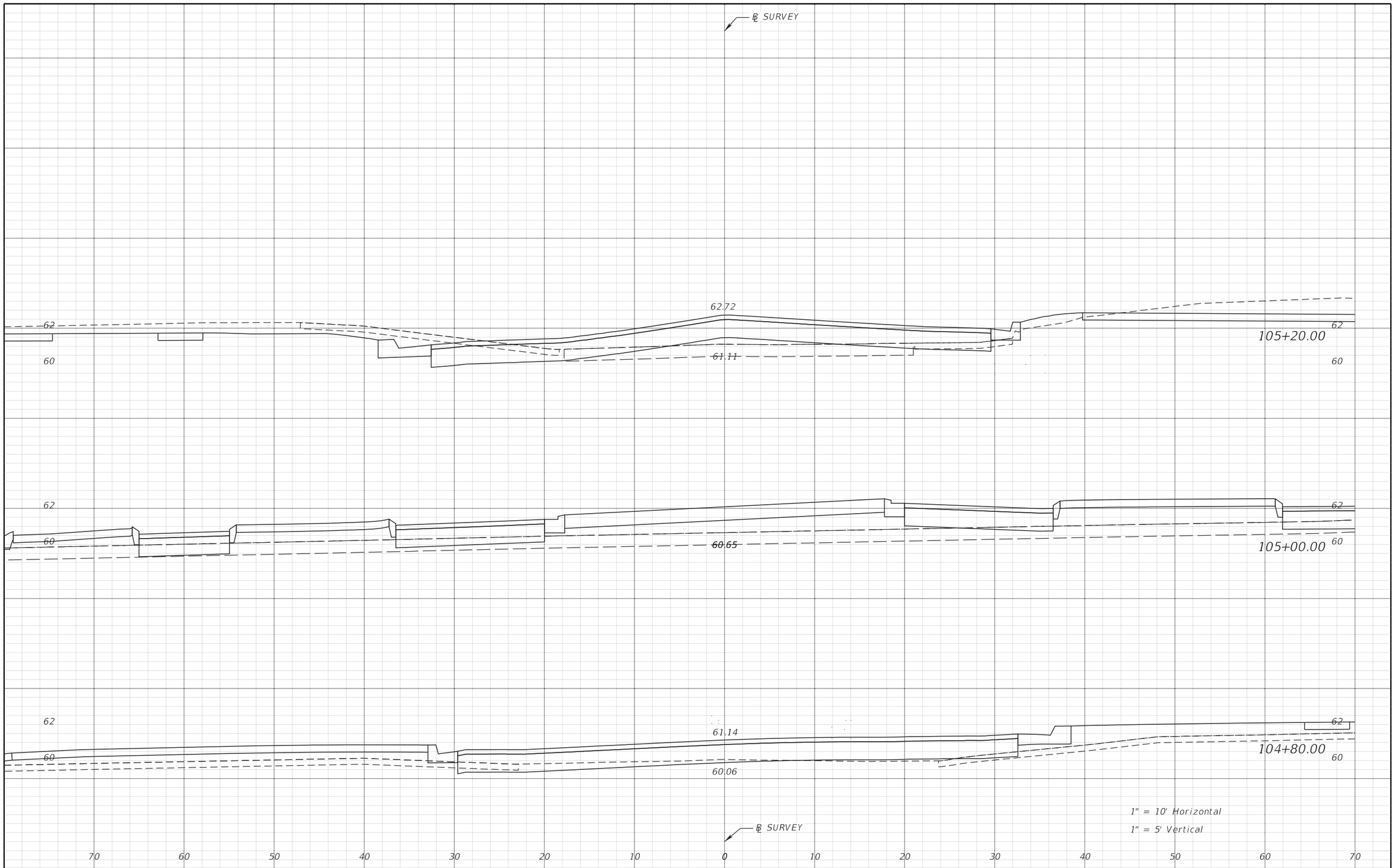
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
E LINEBAUGH AVE

SHEET NO. 51



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

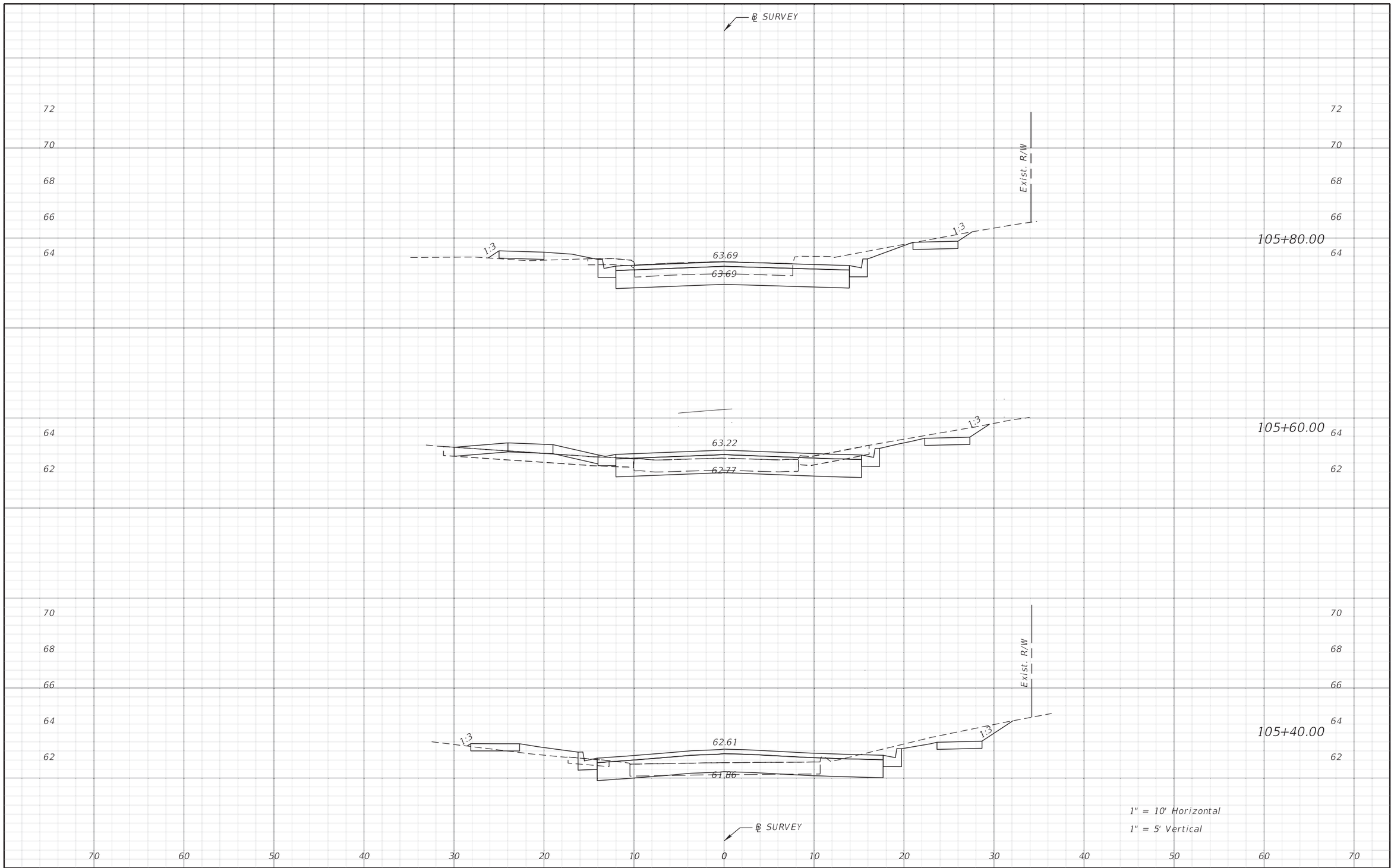
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
E LINEBAUGH AVE

SHEET NO. 52



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

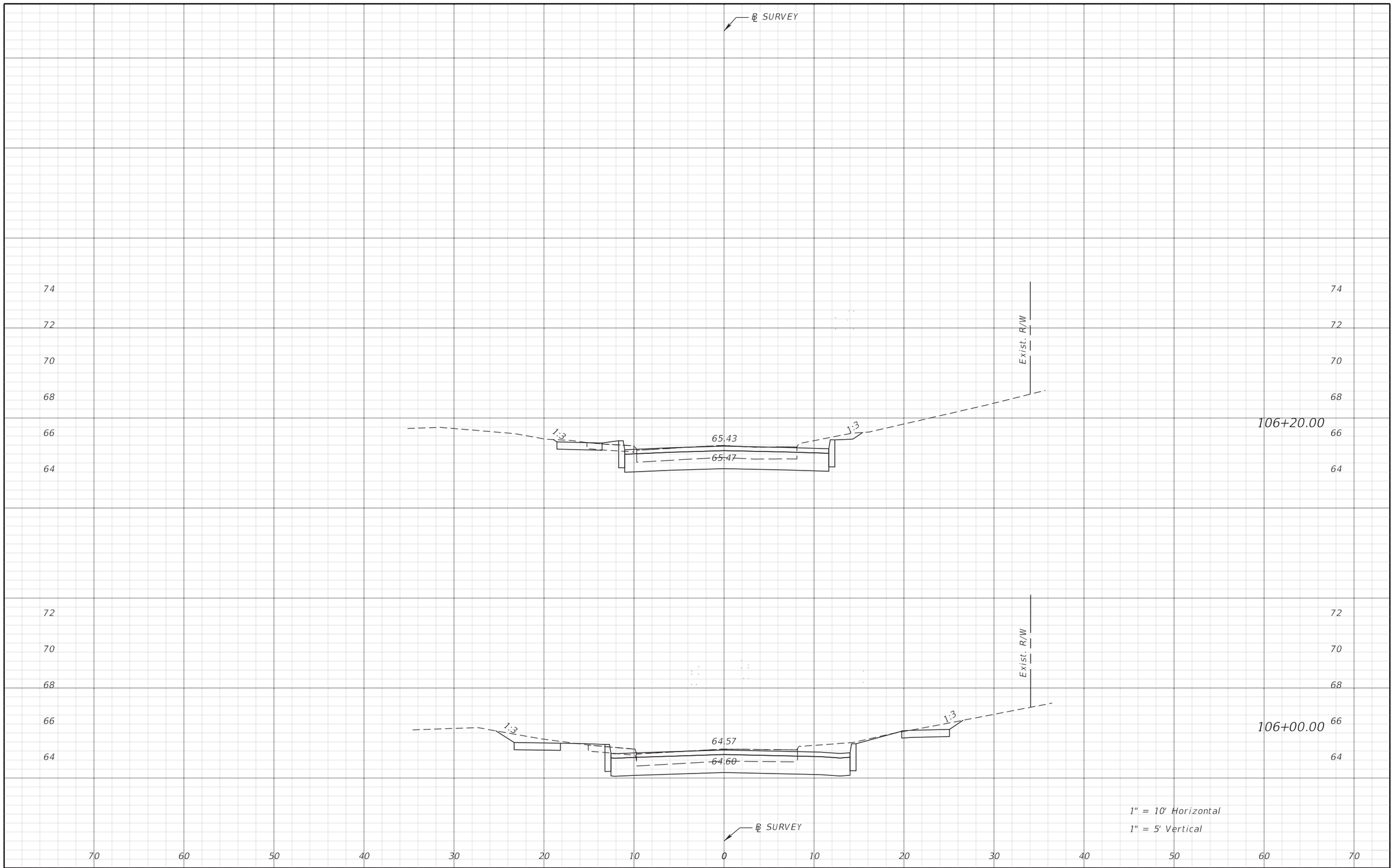
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
E LINEBAUGH AVE

SHEET NO. 53



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
E LINEBAUGH AVE

SHEET NO. 54

℄ SURVEY

Exist. R/W

Exist. R/W

106+60.00

67.20

END RECONSTRUCTION
STA. 106+54.15
℄ SURVEY E LINEBAUGH AVE
MATCH EXIST.

Exist. R/W

Exist. R/W

106+40.00

66.33

66.33

℄ SURVEY

1" = 10' Horizontal

1" = 5' Vertical

76 74 72 70 68 66

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

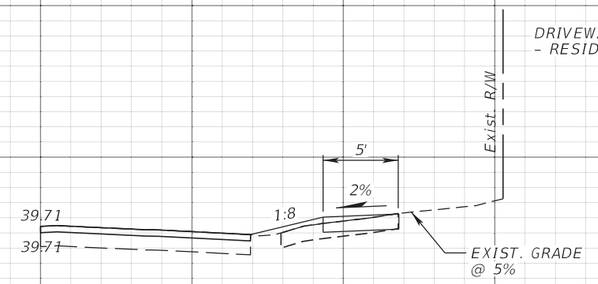
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

CROSS SECTIONS
E LINEBAUGH AVE

SHEET NO. 55

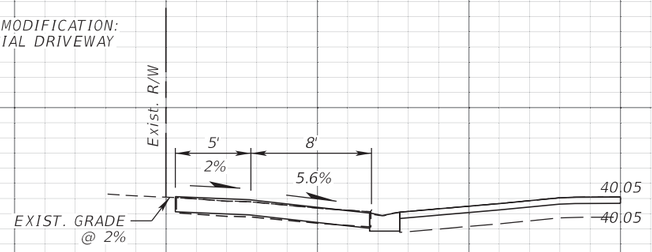
℄ SURVEY

DRIVEWAY CLOSURE:
– RESIDENTIAL DRIVEWAY



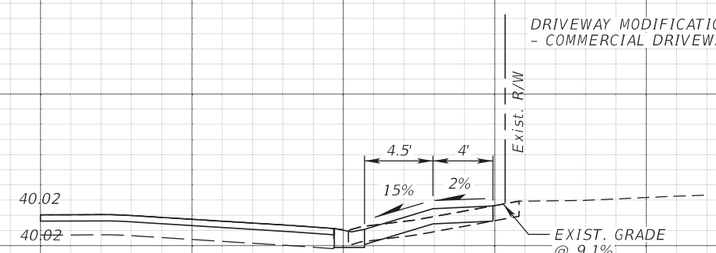
13+47.72

DRIVEWAY MODIFICATION:
– COMMERCIAL DRIVEWAY



12+03.17

DRIVEWAY MODIFICATION:
– COMMERCIAL DRIVEWAY



11+98.90

1" = 10' Horizontal
1" = 5' Vertical

℄ SURVEY

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 56

℄ SURVEY

DRIVEWAY MODIFICATION:
– RESIDENTIAL DRIVEWAY

Exist. R/W

5.7' 5'

2% 2%

38.36

38.36

EXIST. GRADE
@ 4%

15+98.80

DRIVEWAY NEW CONSTRUCTION:
– RESIDENTIAL DRIVEWAY
– GENERAL APPLICATION

Exist. R/W

5.9' 4' 6'

3.8% 2% 6.7%

38.38

38.38

EXIST. GRADE
@ 1.3%

G 12

14+71.26

DRIVEWAY NEW CONSTRUCTION:
– RESIDENTIAL DRIVEWAY
– GENERAL APPLICATION

Exist. R/W

6.2' 4' 6.3'

7.2% 2% 6.5%

39.44

39.44

EXIST. GRADE
@ 0.3%

G 12

13+72.56

1" = 10' Horizontal

1" = 5' Vertical

℄ SURVEY

44 42 40 38 36

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

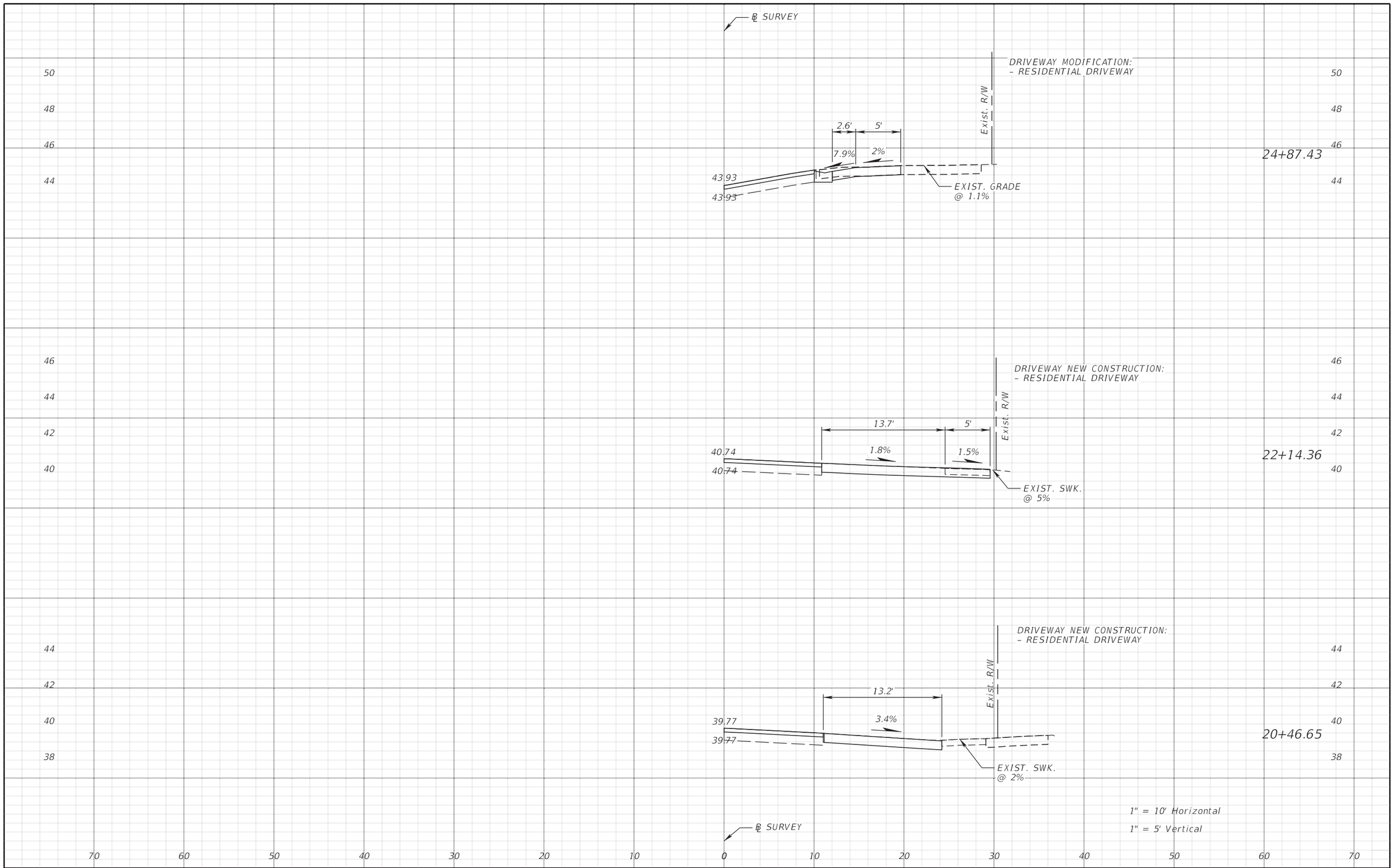
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 57



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

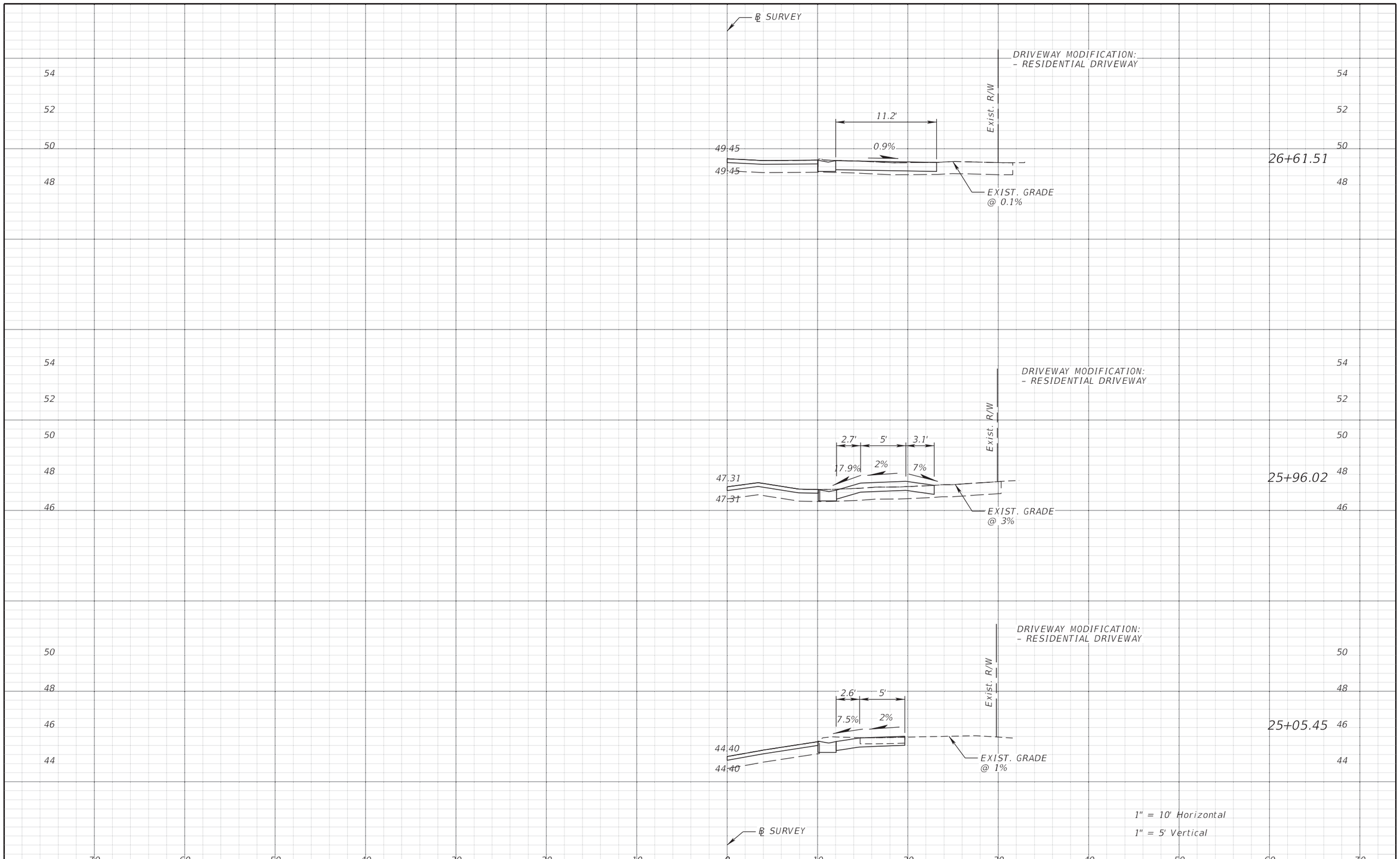
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 58



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

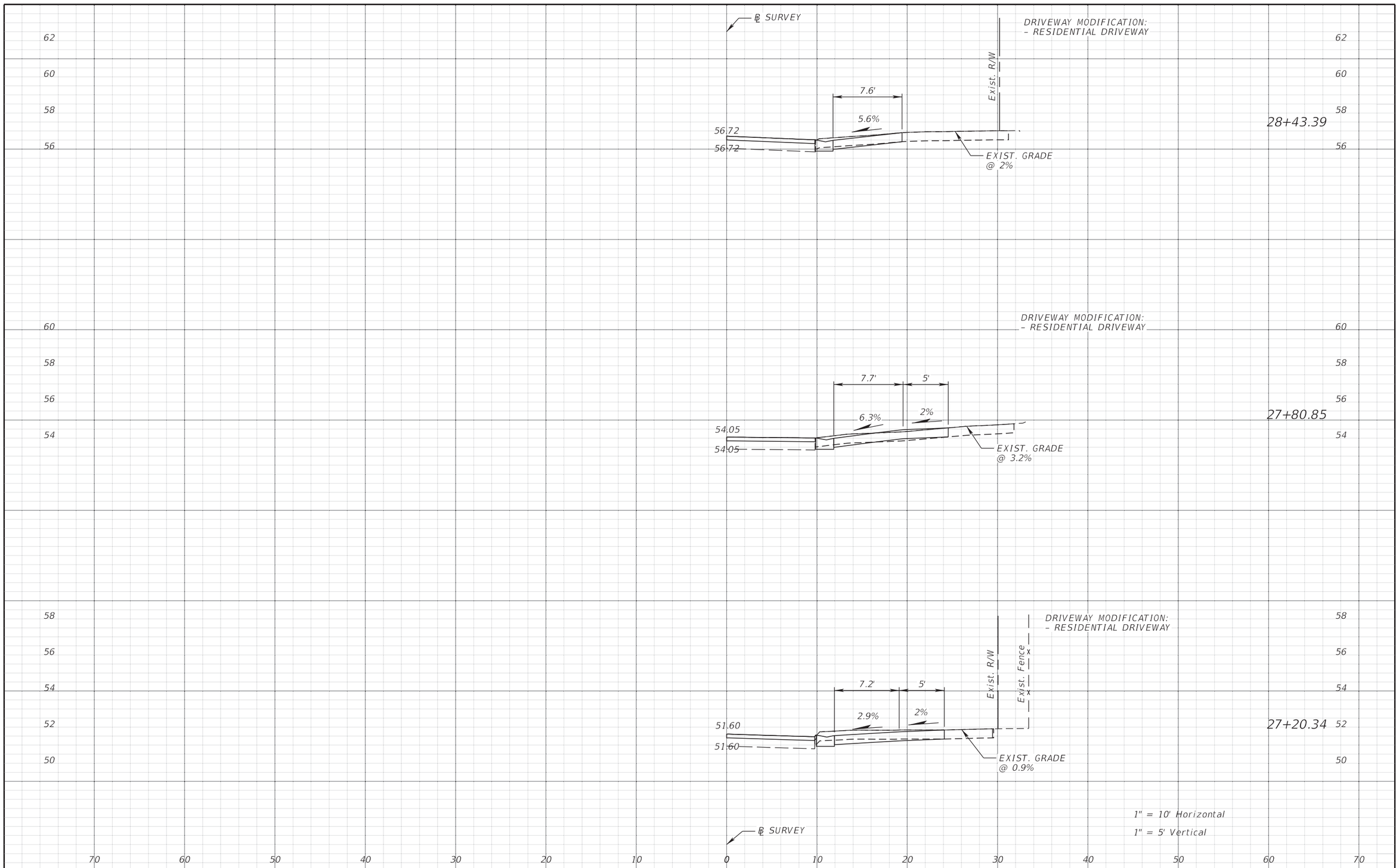
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 59



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

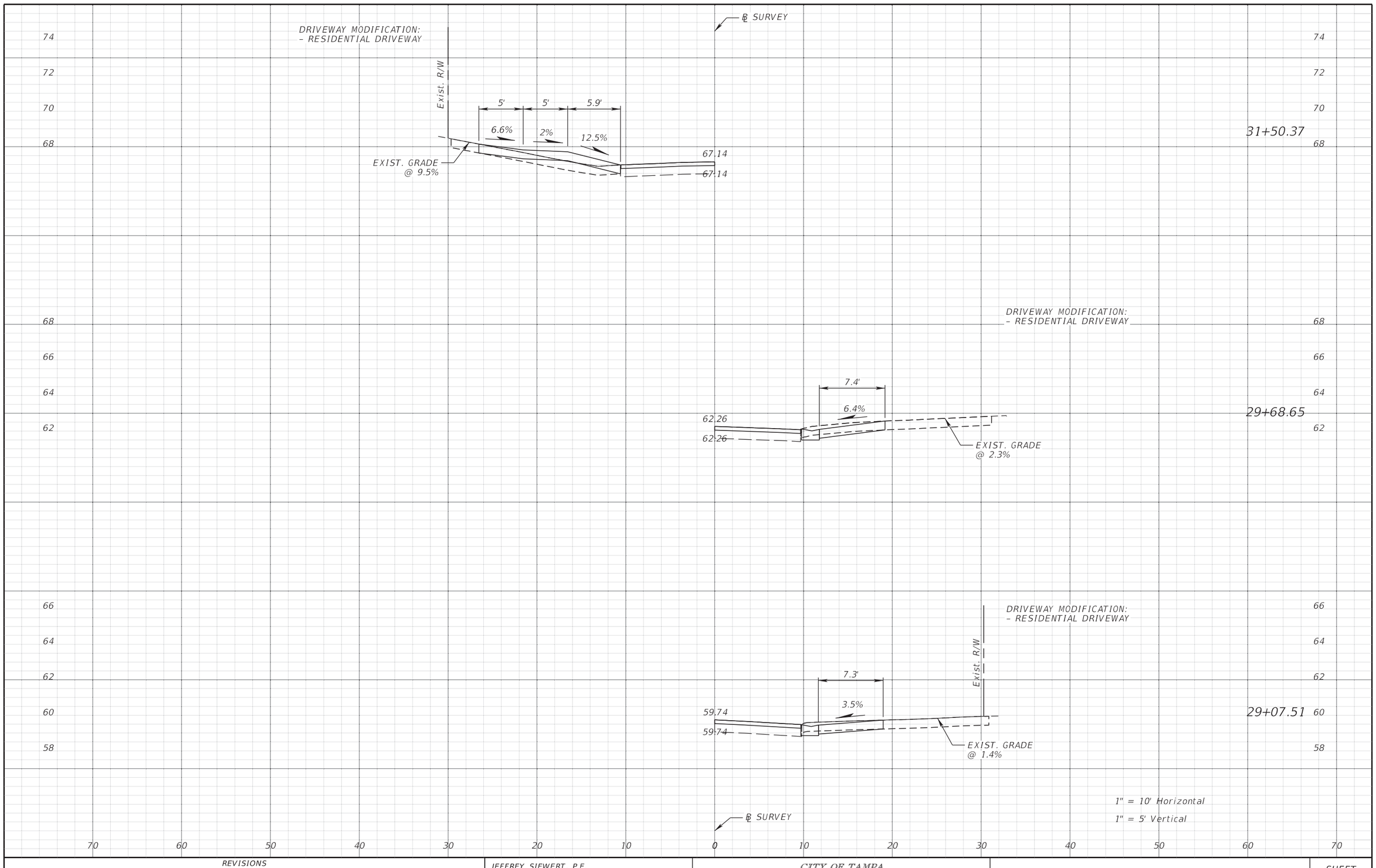
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 60



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

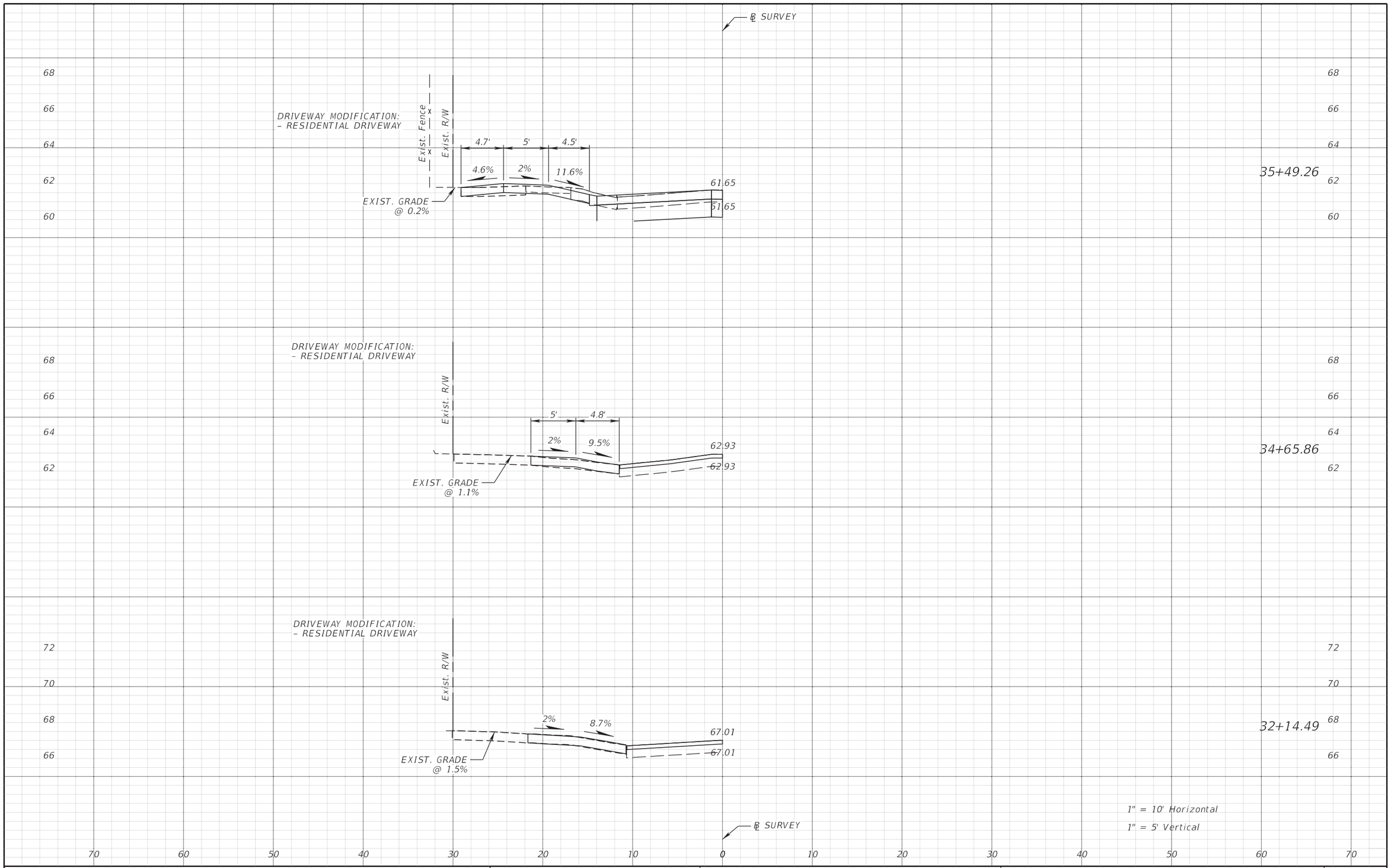
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 61



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

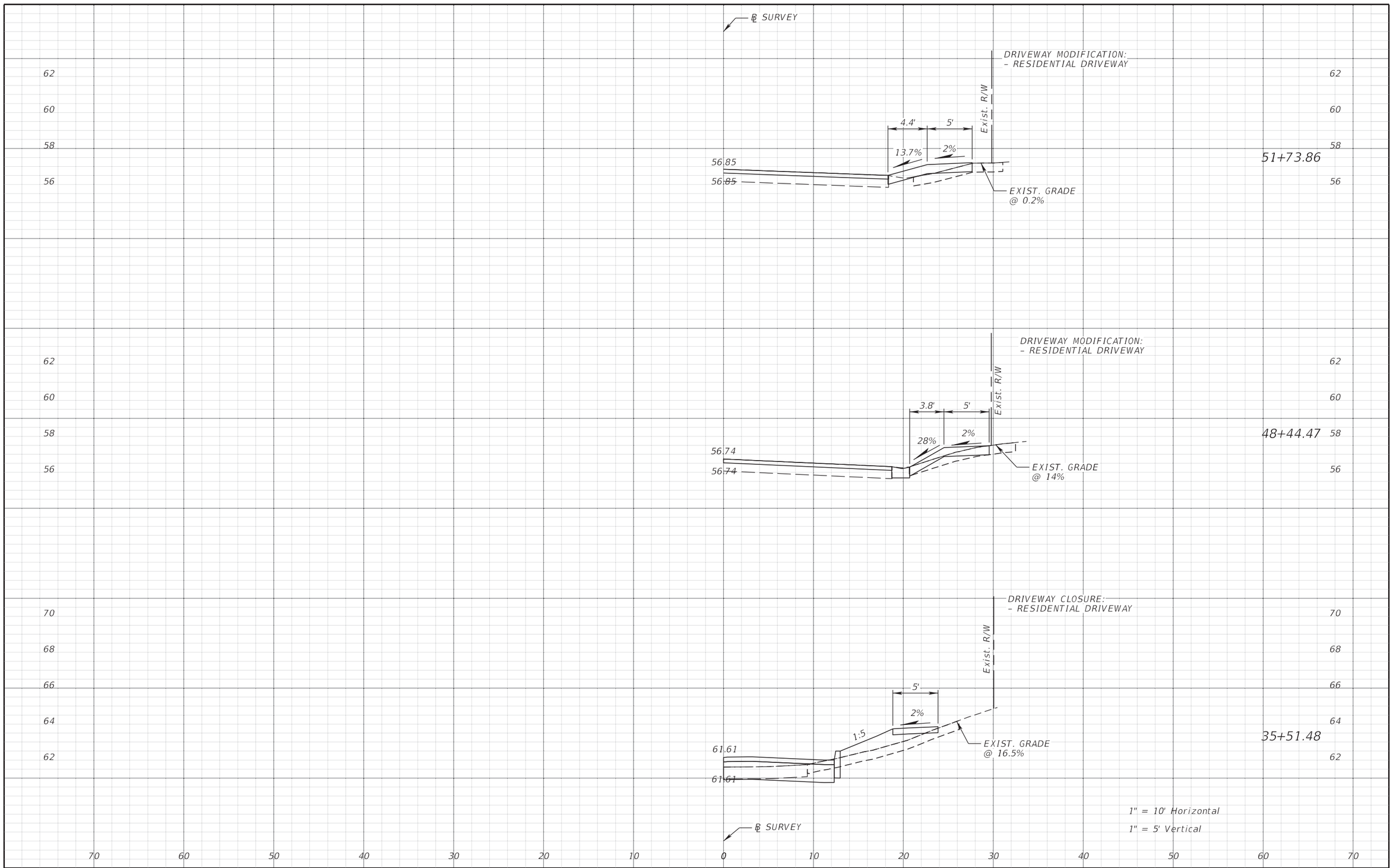
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 62



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

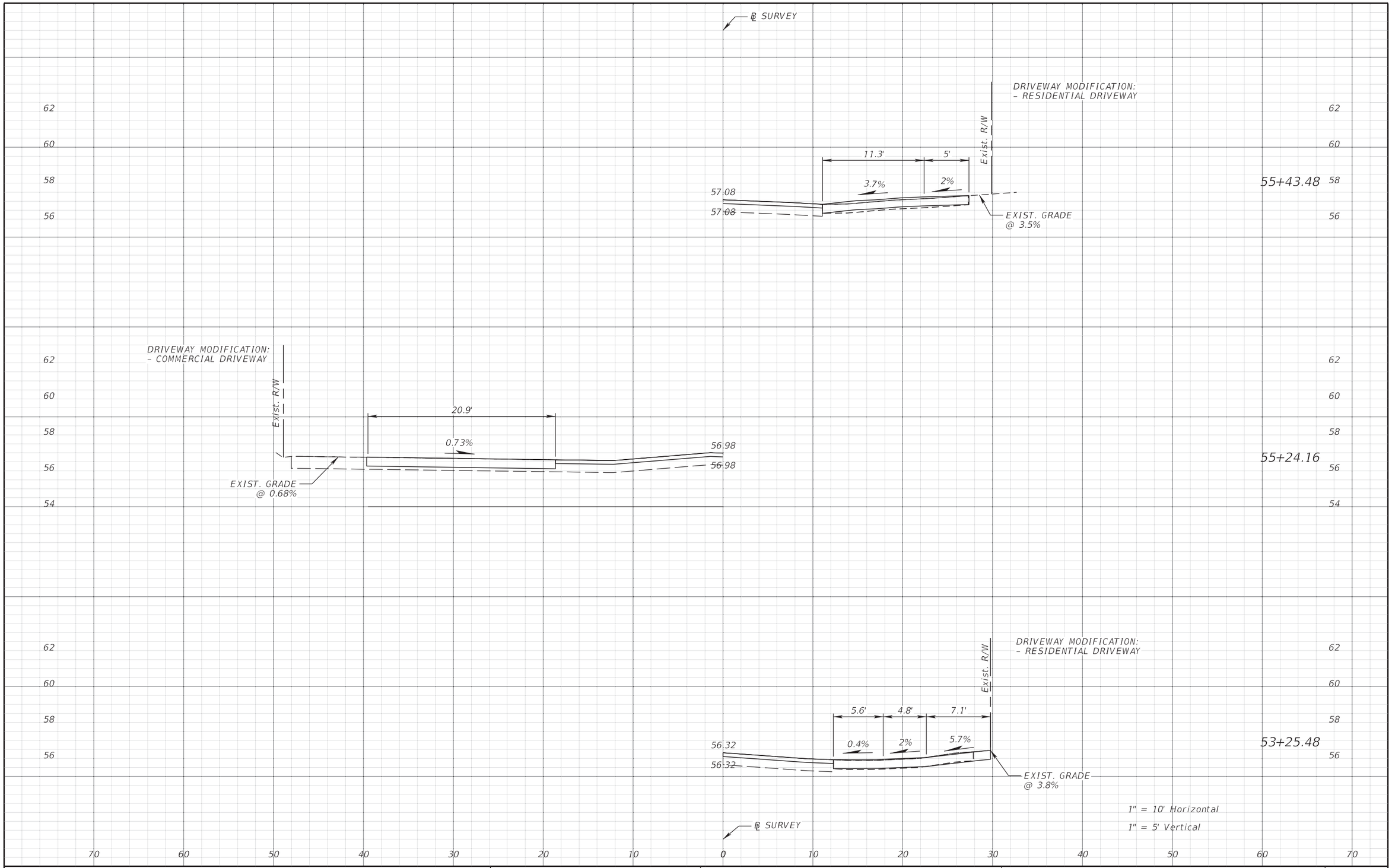
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 63



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

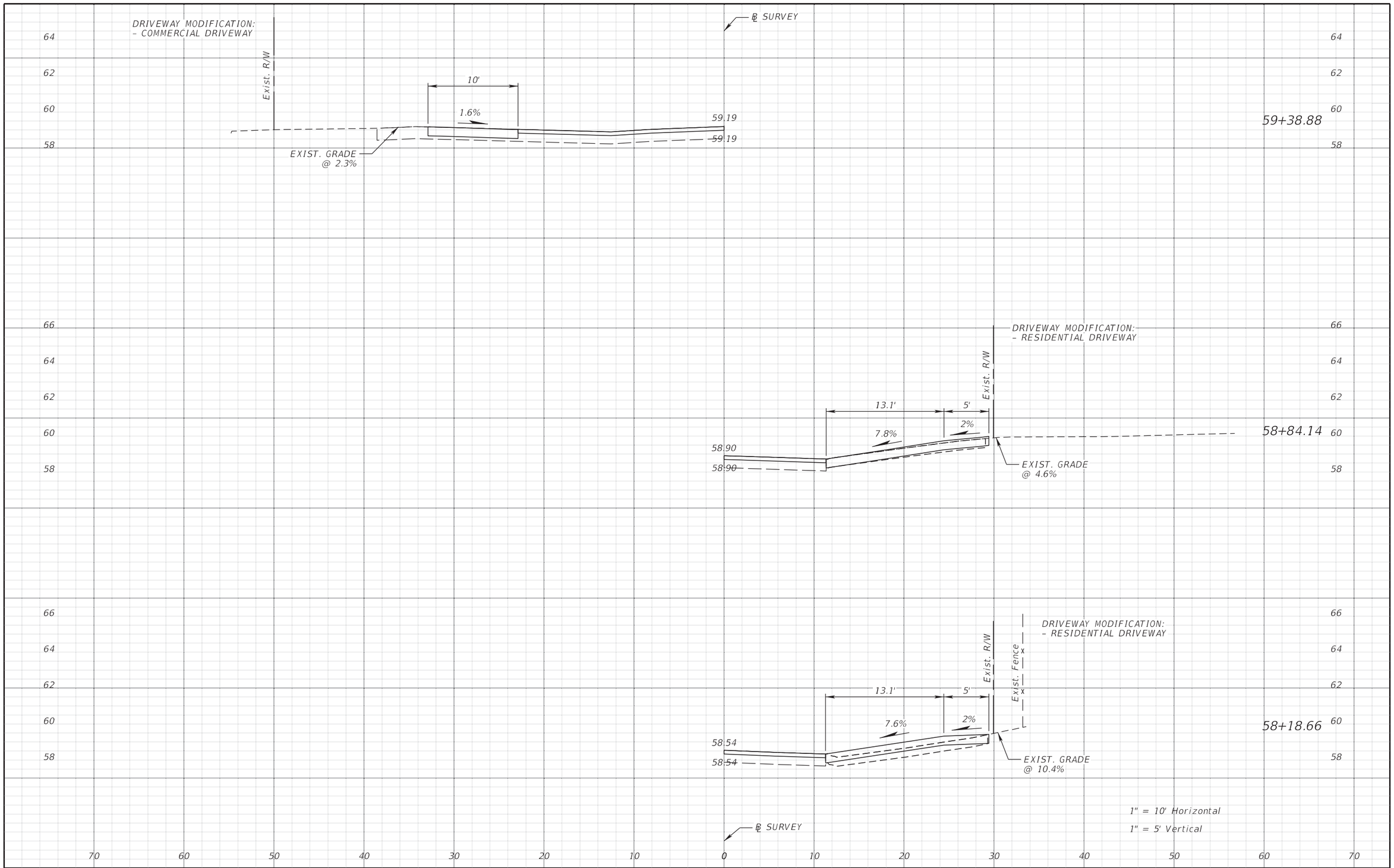
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 64



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

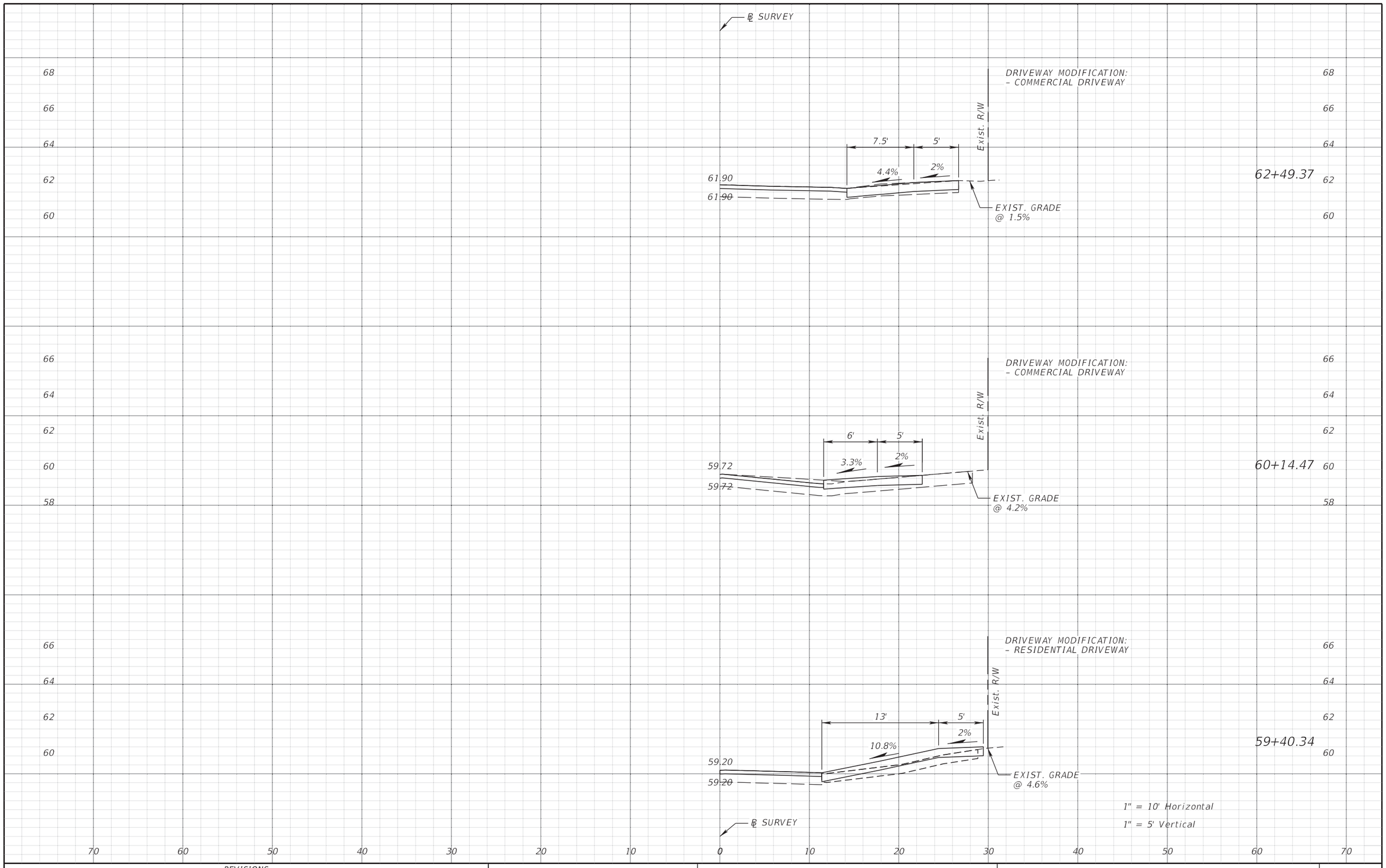
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 65



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

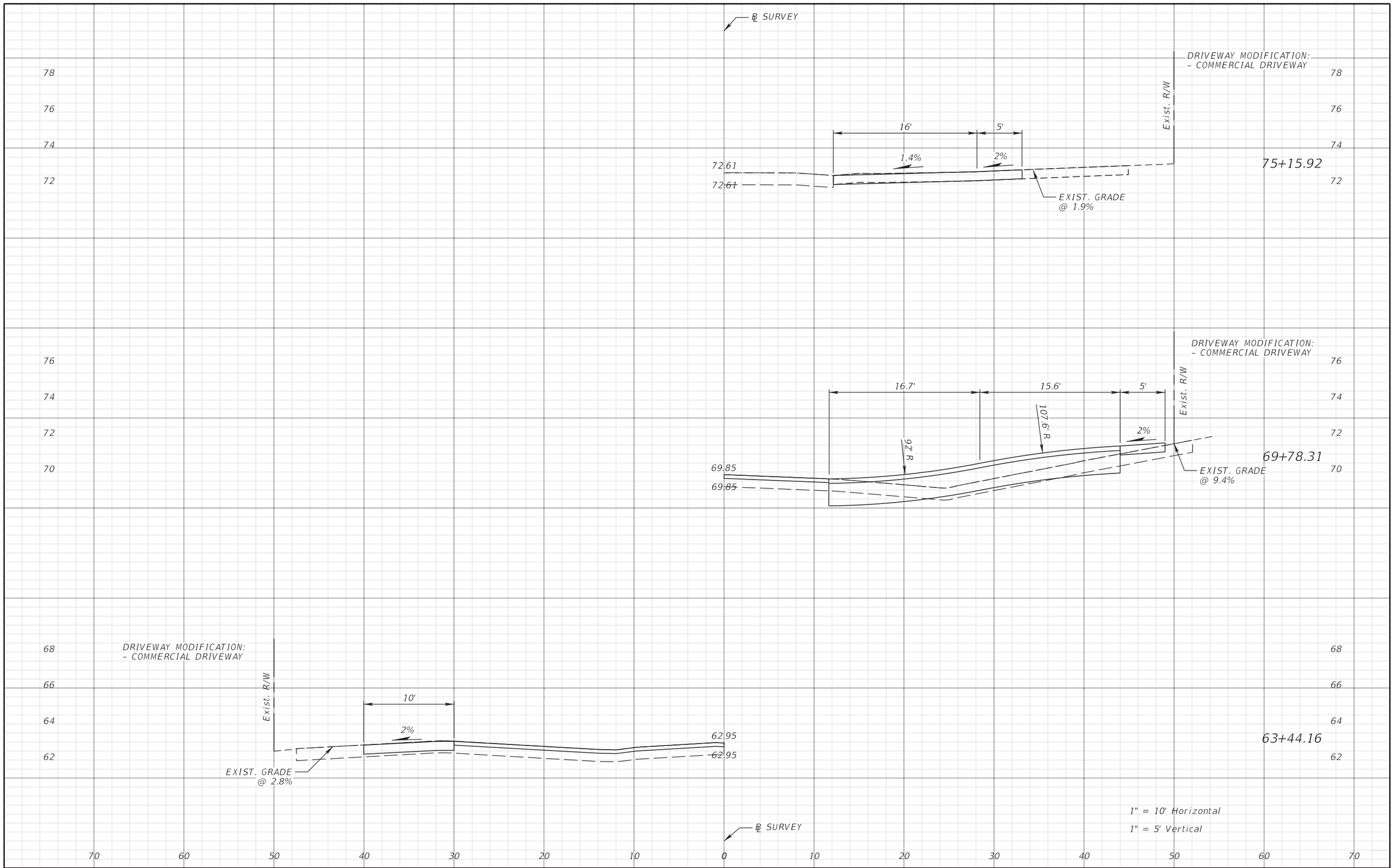
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 66



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 67

DRIVEWAY MODIFICATION:
– COMMERCIAL DRIVEWAY

℄ SURVEY

Exist. R/W

10'

0.5%

63.18

63.18

EXIST. GRADE
@ 0.5%

80+99.99

DRIVEWAY MODIFICATION:
– COMMERCIAL DRIVEWAY

Exist. R/W

10'

2%

64.25

64.25

EXIST. GRADE
@ 2.9%

79+71.70

DRIVEWAY MODIFICATION:
– COMMERCIAL DRIVEWAY

Exist. Fence

Exist. R/W

10'

2%

70.75

70.75

EXIST. GRADE
@ 2.9%

76+48.68

℄ SURVEY

1" = 10' Horizontal

1" = 5' Vertical

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

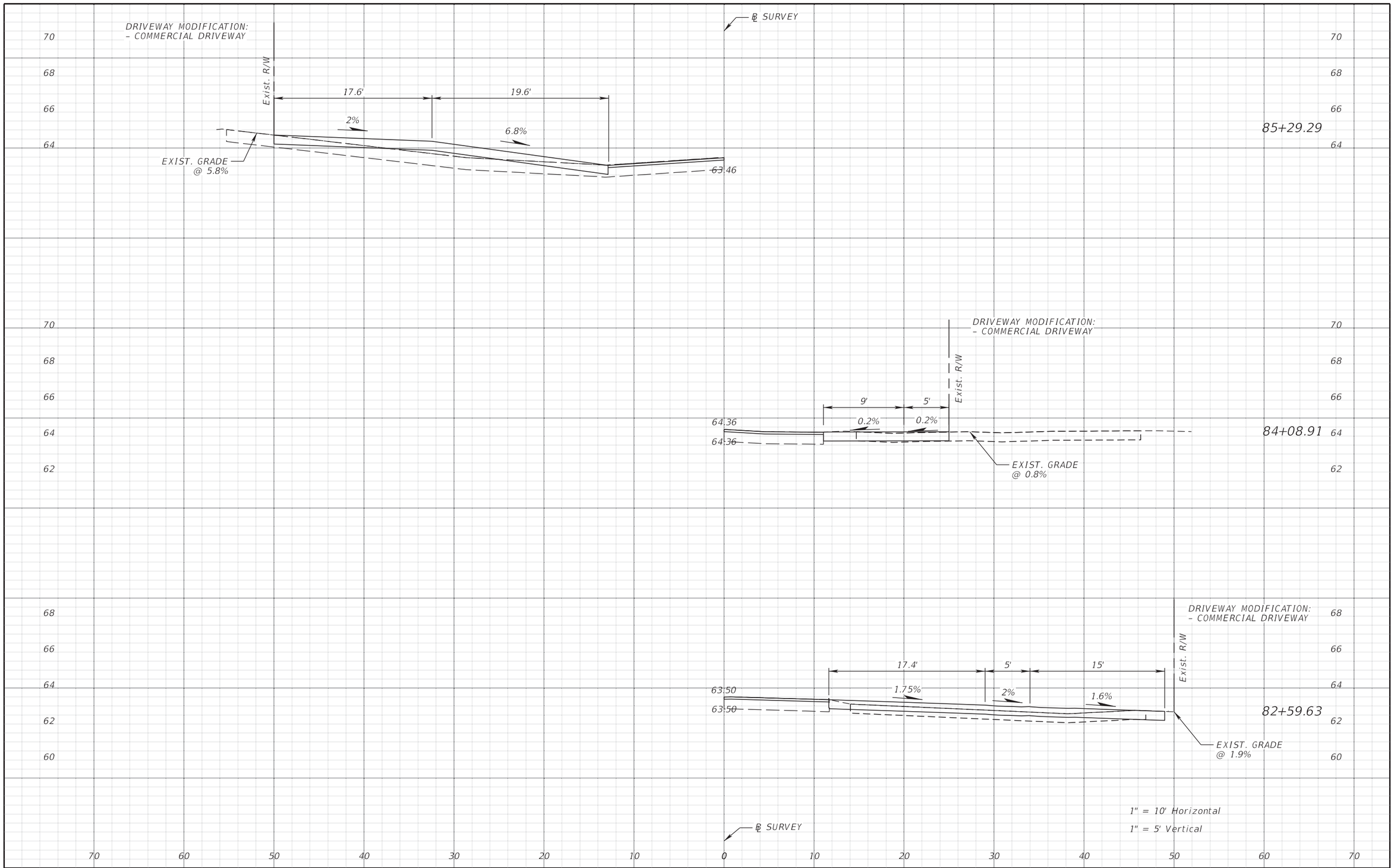
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 68



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

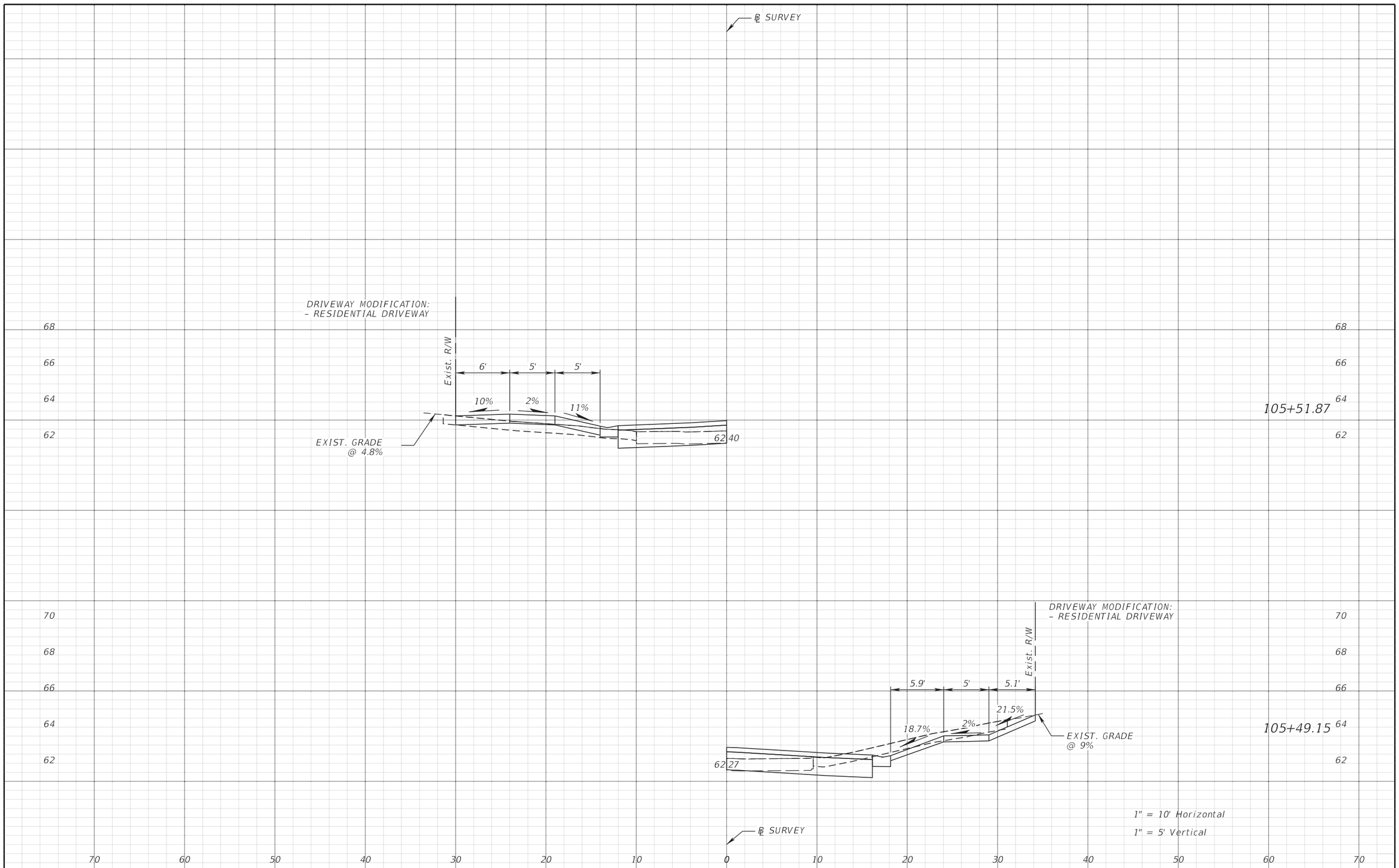
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
N 46TH ST

SHEET NO. 69



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

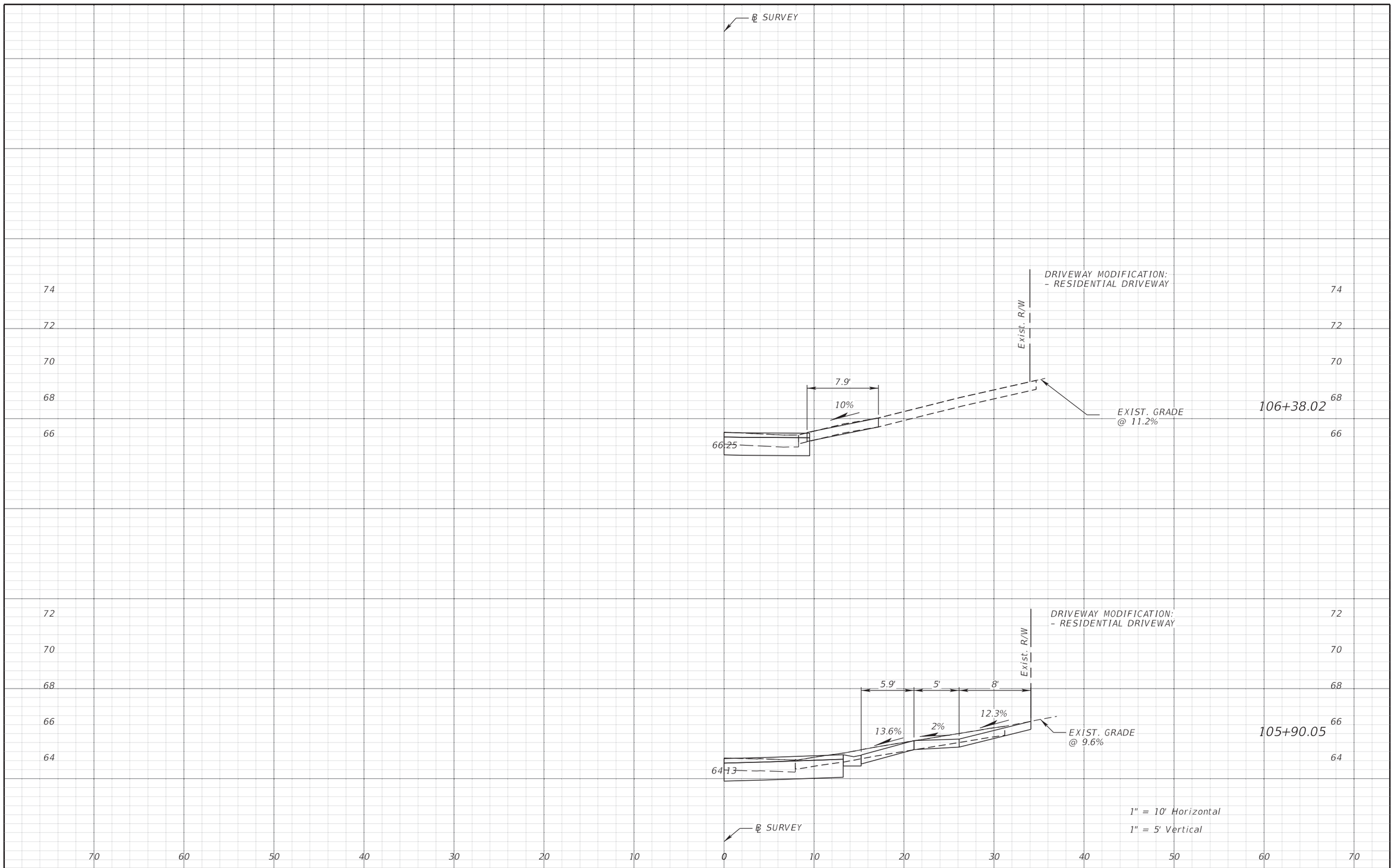
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
E LINEBAUGH AVE

SHEET NO. 70



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

DRIVEWAY HALF-SECTIONS
E LINEBAUGH AVE

SHEET NO. 71

TEMPORARY TRAFFIC CONTROL PLAN - NOTES

GENERAL

1. FOR GENERAL TRAFFIC CONTROL ZONE REQUIREMENTS AND ADDITIONAL INFORMATION, REFER TO STANDARD PLANS INDEX, 102-600 SERIES. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH INDEX NO. 102-600 SERIES UNLESS OTHERWISE NOTED.
2. THE EXACT LOCATION OF ALL SIGNS AND BARRICADES SHALL BE DETERMINED IN THE FIELD TO MEET THE STANDARD PLANS INDEX 102-600.
3. TEMPORARY REFLECTIVE PAVEMENT MARKERS SHALL BE PROVIDED WITH TEMPORARY STRIPING IN ACCORDANCE WITH STANDARD PLANS INDEXES 102-600 AND 706-001.
4. ALL EXISTING PAVEMENT MARKINGS OUTSIDE OF THE CONSTRUCTION LIMITS THAT ARE REMOVED FOR TRAFFIC CONTROL PURPOSES ARE TO BE REPLACED IN-KIND UPON COMPLETION OF THE TRAFFIC CONTROL PURPOSE WHICH CAUSED ITS REMOVAL.
5. THROUGHOUT THE MILLING & RESURFACING OPERATIONS, USE A SELF-CONTAINED VACUUM TYPE MOBILE BROOM, OR EQUIVALENT, FOR CLEANUP OF MILLED DUST MATERIAL.
6. ENSURE THAT STREET NAME SIGNS ARE VISIBLE TO FACILITATE EMERGENCY VEHICLE TRAFFIC.
7. THERE WILL BE NO PAVEMENT MARKING ERADICATION PERMITTED AFTER THE FINAL ASPHALT COURSE IS PLACED. ANY EXISTING ROADWAYS THAT HAVE TEMPORARY STRIPING ERADICATED SHALL HAVE THE FULL WIDTH OF THE EXISTING TOP PAVEMENT COURSE MILLED AND RESURFACED PRIOR TO FINAL ACCEPTANCE.

PEDESTRIANS

1. PEDESTRIAN FACILITIES SHALL BE MAINTAINED AND SHALL CONFORM TO ADA REQUIREMENTS.
2. THROUGHOUT THE PROJECT LIMITS WHERE SIDEWALKS CURRENTLY EXIST, PEDESTRIAN TRAFFIC SHALL BE MAINTAINED ON AT LEAST ONE SIDE OF EACH ROADWAY ON THE PROJECT AT ALL TIMES, USING STANDARD PLANS INDEX 102-660. THE SIDEWALK TRAVEL WAY SHALL BE A MINIMUM OF 4-FT WIDE, WITH A PAVED SURFACE, RAMPED AS PER STANDARD PLANS INDEX 522-002. TEMPORARY ASPHALT MAY BE USED FOR THE PAVED SURFACE AND SHALL BE PAID FOR UNDER LUMP SUM MAINTENANCE OF TRAFFIC, PAY ITEM 102-1. ENSURE THAT A SAFE AND UNOBSTRUCTED ROUTE EXISTS FOR PEDESTRIANS, INCLUDING AT BUS STOP LOCATIONS. REFER TO STANDARD PLANS INDEX 102-660.
3. ASPHALT MILLINGS ARE NOT ALLOWED FOR TEMPORARY SIDEWALK.

SIGNALS, SIGNING & MARKING

1. ALL EXISTING WARNING, GUIDE, AND REGULATORY SIGNS SHALL BE MAINTAINED AT ALL TIMES. SIGNS SHALL BE RELOCATED, REMOVED OR COVERED FOR EACH PHASE'S TRAFFIC PATTERN.
2. ALL EXISTING TRAFFIC SIGNALS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. IN CASES WHERE THE SIGNAL IS TO BE REMOVED IN THE FINAL PLANS, THE SIGNAL SHALL BE MAINTAINED UNTIL THE INTERSECTION IS IN ITS FINAL CONFIGURATION AS SHOWN IN THE TRAFFIC CONTROL PLANS.
3. ALL EXISTING SIGNS TO REMAIN, UNLESS NOTED OTHERWISE.

LANE CLOSURES / DETOURS

1. IN ACCORDANCE WITH FDOT SPECIFICATION 8-8.4, SPECIAL EVENT DAYS FOR THIS PROJECT INCLUDE:
   A. BAY AREA RENAISSANCE FESTIVAL (APPROX. DATES: FEB. 16 - MAR. 27)

   NO DETOUR SHALL BE ACTIVE DURING ANY OF THESE LISTED EVENTS
2. PLACE A PCMS 7 DAYS IN ADVANCE OF ANY CLOSURES, TRAFFIC SHIFTS, OR DETOUR NOTIFYING THE PUBLIC OF THE UPCOMING EVENT.

MESSAGE 1:
ROAD
WORK ON
46TH ST

MESSAGE 2:
BEGINS
MM/DD

MESSAGE 1:
ROAD
WORK ON
LNEBAUGH

MESSAGE 2:
BEGINS
MM/DD

3. COORDINATE ALL WORK, ALL LANE CLOSURES, AND ALL TEMPORARY TRAFFIC CONTROL WITH ANY OTHER PROJECTS IN THE VICINITY.
4. THE DETOURS ILLUSTRATED IN THE DETOUR SHEETS SHOULD BE APPLIED IN ALL INSTANCES.
5. ACCESSABILITY TO LOCAL TRAFFIC TO BE MAINTAINED AT ALL TIMES DURING DETOUR.

TTCP GENERAL NOTES

PHASE 1 - N 46TH ST FROM E BUSCH BLVD TO E BOUGAINVILLEA AVE

THE INTENT OF THIS PHASE IS TO SHIFT NORTHBOUND AND SOUTHBOUD TRAFFIC TO A ONE-LANE TWO-WAY SETUP. THIS WILL ALLOW FOR MILLING AND RESURFACING OF THE ADJACENT LANE.

1. INSTALL TRAFFIC CONTROL DEVICES, RECONFIGURE ONE-LANE TWO-WAY SETUP, AND SIGNING IN ACCORDANCE WITH STANDARD PLAN INDEXES 102-603, 102-604, AND 102-605.
2. CONSTRUCT CURB & GUTTER, SIGNALIZATION, SIGNING, AND DRAINAGE IMPROVEMENTS WITHIN WORK ZONE.
3. INSTALL PAINTED PAVEMENT MARKINGS AS SHOWN IN THE SIGNING AND PAVEMENT MARKING PLANS.
4. REPEAT STEPS 1 THROUGH 3 TO MILL & RESURFACE REMAINING PAVEMENT.

CONCURRENT WORK:

1. INSTALL EROSION CONTROL DEVICES
2. SIGN CONSTRUCTION
3. PLACING SOD

PHASE 2 - N 46TH ST FROM E BOUGAINVILLEA AVE TO E FOWLER AVE

THE INTENT OF THIS PHASE IS TO SHIFT NORTHBOUND AND SOUTHBOUD TRAFFIC TO A ONE-LANE TWO-WAY SETUP. THIS WILL ALLOW FOR MILLING AND RESURFACING OF THE ADJACENT LANE.

1. INSTALL TRAFFIC CONTROL DEVICES, RECONFIGURE ONE-LANE TWO-WAY SETUP, AND SIGNING IN ACCORDANCE WITH STANDARD PLAN INDEXES 102-603, 102-604, AND 102-605.
2. CONSTRUCT CURB & GUTTER, SIGNALIZATION, SIGNING, AND DRAINAGE IMPROVEMENTS WITHIN WORK ZONE.
3. INSTALL PAINTED PAVEMENT MARKINGS AS SHOWN IN THE SIGNING AND PAVEMENT MARKING PLANS.
4. REPEAT STEPS 1 THROUGH 3 TO MILL & RESURFACE REMAINING PAVEMENT.

CONCURRENT WORK:

1. INSTALL EROSION CONTROL DEVICES
2. SIGN CONSTRUCTION
3. PLACING SOD

PHASE 3 - N 46TH ST FROM E BUSCH BLVD TO E FOWLER AVE

THE INTENT OF THIS PHASE IS TO MAINTAIN NORTHBOUND AND SOUTHBOUD TRAFFIC AND CONSTRUCT PROPOSED IMPROVEMENTS OUTSIDE OF THE ROADWAY.

1. INSTALL TRAFFIC CONTROL DEVICES, RECONFIGURE ONE-LANE TWO-WAY SETUP, AND SIGNING IN ACCORDANCE WITH STANDARD PLAN INDEX 102-601.
2. MAINTAIN PEDESTRIAN TRAFFIC IN ACCORDANCE WITH STANDARD PLAN INDEX 102-660.
3. CONSTRUCT CURB & GUTTER, CURB RAMPS, SIDEWALKS (ONE DIRECTION AT A TIME SO PEDESTRIAN TRAFFIC MAY BE MAINTAINED), 10' CONC. SWK., SIGNALIZATION, SIGNING, AND DRAINAGE IMPROVEMENTS WITHIN WORK ZONE.

CONCURRENT WORK:

1. SIGN CONSTRUCTION
2. PLACING SOD

PHASE 4 - N 46TH ST AT E LINEBAUGH AVE

THE INTENT OF THIS PHASE IS TO CLOSE NORTHBOUND AND SOUTHBOUD TRAFFIC ALONG N 46TH ST AND TO CLOSE EASTBOUND AND WESTBOUND TRAFFIC ALONG E LINEBAUGH AVE. THIS WILL ALLOW FOR THE CONSTRUCTION OF THE MINI-ROUNDABOUT.

- SEE DETOUR SHEET

TTCP PHASING NOTES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

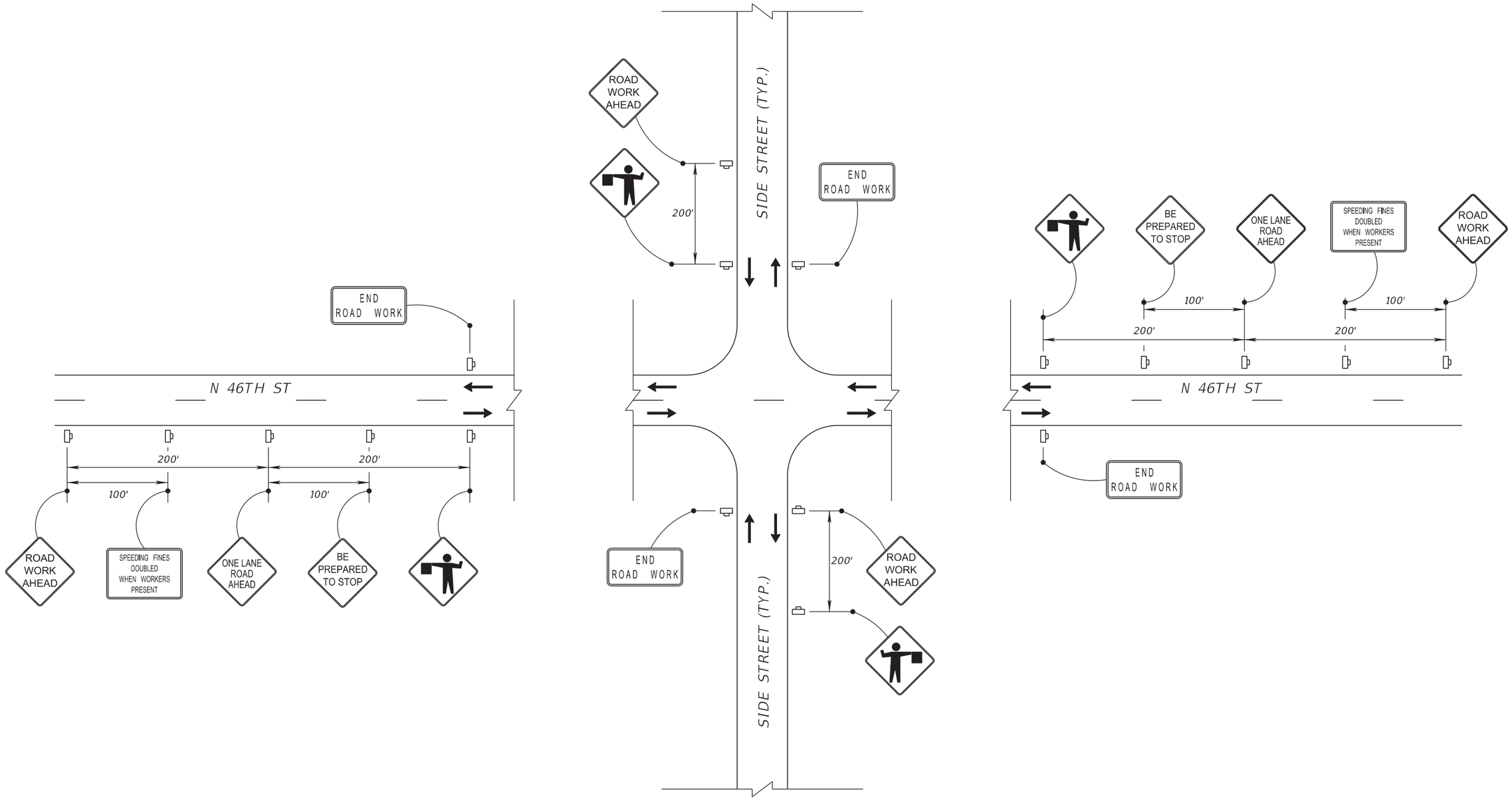
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TEMPORARY TRAFFIC CONTROL PLANS (1)

SHEET NO. 72



N 46TH ST ADVANCE WARNING LAYOUT DETAIL
N.T.S.

LEGEND

- LANE IDENTIFICATION AND DIRECTION OF TRAFFIC
- WORK ZONE SIGN

ADVANCE WARNING DETAIL LAYOUT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

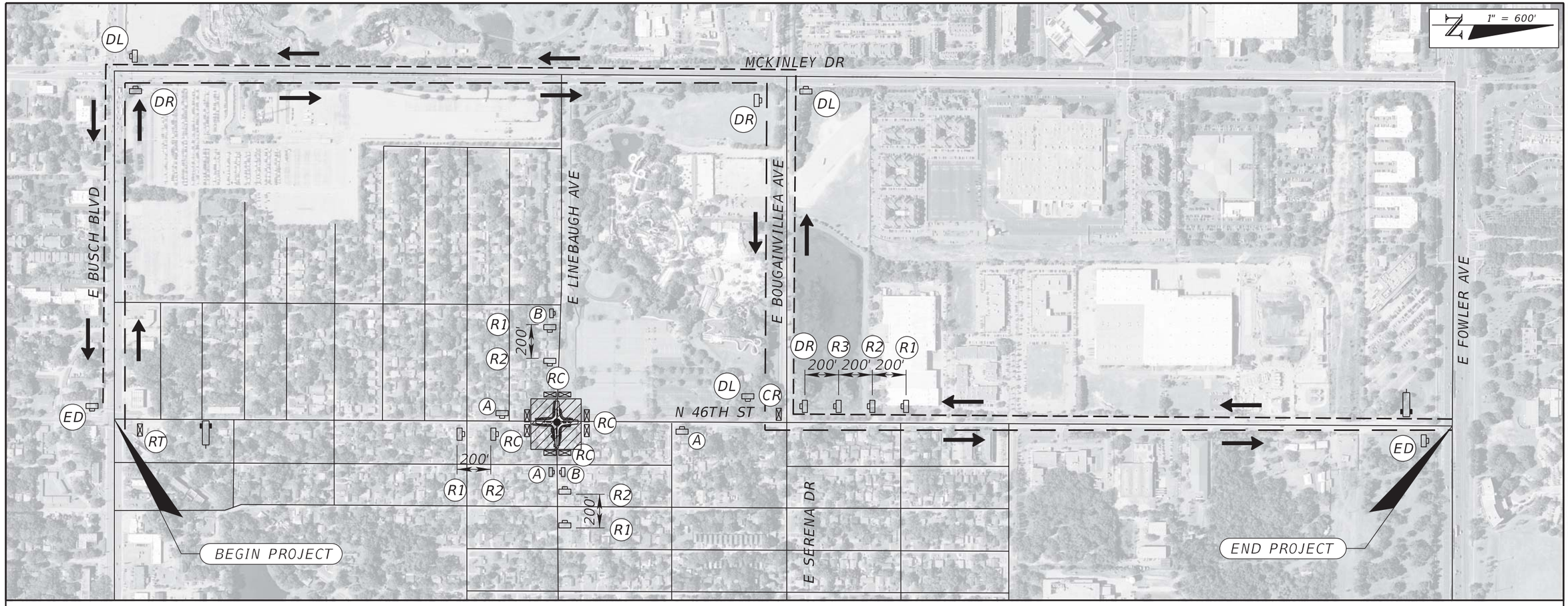
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

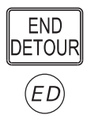
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TEMPORARY TRAFFIC CONTROL PLANS (2)

SHEET NO. 73



SIGN LEGEND

 A	 B	 DR	 DL	 CR	 CL
 R1	 R2	 R3	 ED	 RC	 RT

LEGEND

- SOUTHBOUND DETOUR ROUTE
- NORTHBOUND DETOUR ROUTE
- WORK AREA
- TYPE III BARRICADE
- PORTABLE CHANGEABLE (VARIABLE) MESSAGE SIGN
- DIRECTION OF DETOURED TRAFFIC
- WORK ZONE SIGN

N 46TH ST DETOUR DETAIL

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

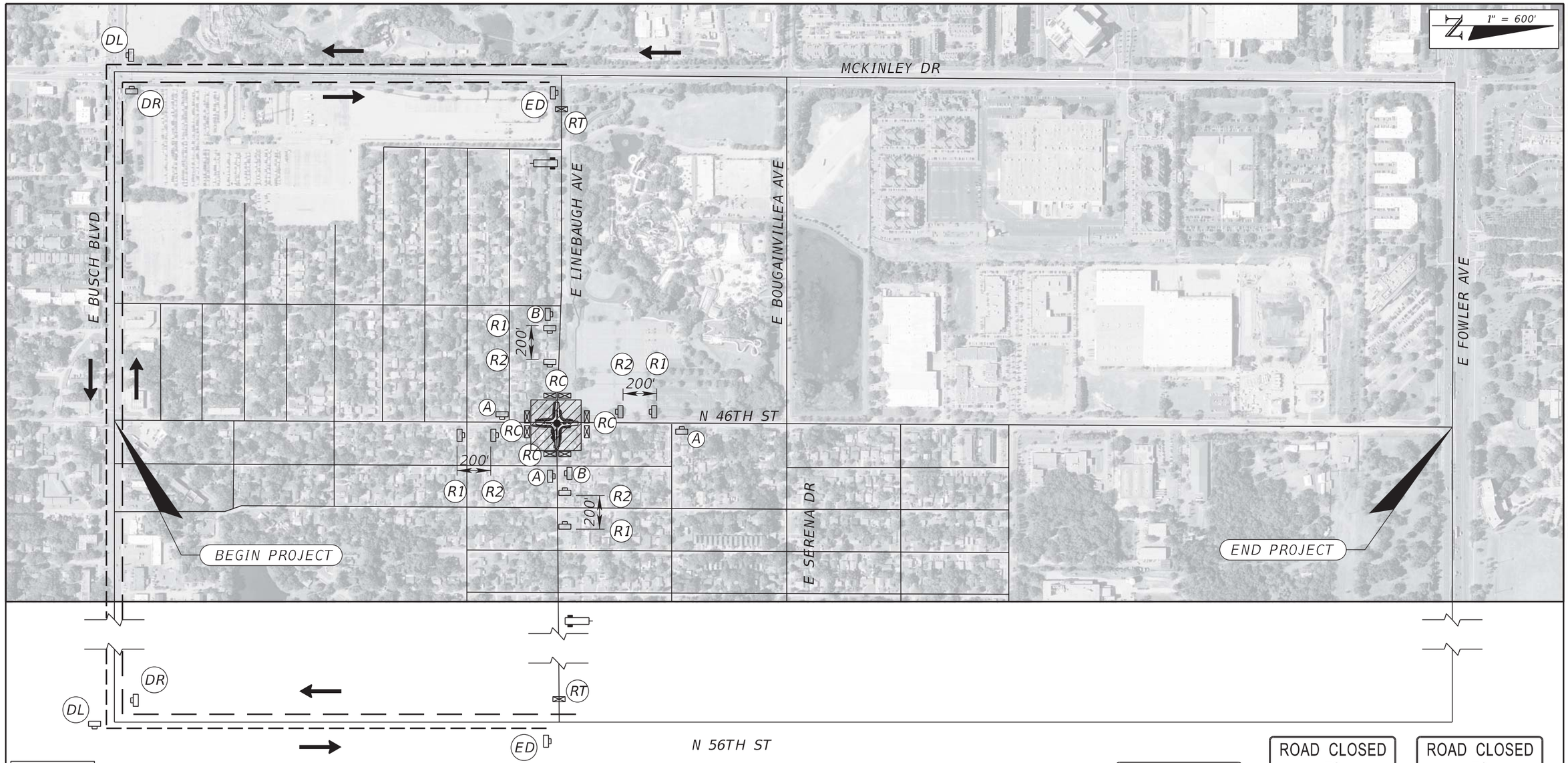
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TEMPORARY TRAFFIC CONTROL PLANS (3)

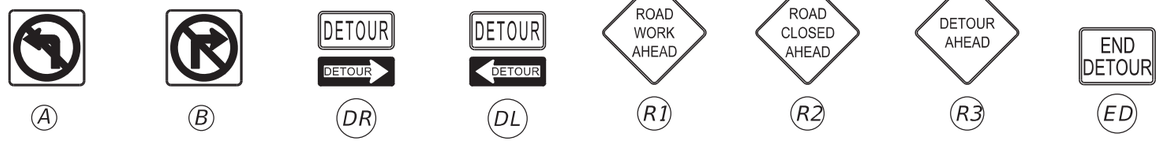
SHEET NO. 74



LEGEND

- EASTBOUND DETOUR ROUTE
- WESTBOUND DETOUR ROUTE
- WORK AREA
- TYPE III BARRICADE
- PORTABLE CHANGEABLE (VARIABLE) MESSAGE SIGN
- DIRECTION OF DETOURED TRAFFIC
- WORK ZONE SIGN

SIGN LEGEND



A B DR DL R1 R2 R3 ED RC RT CR CL

E LINEBAUGH AVE DETOUR DETAIL

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

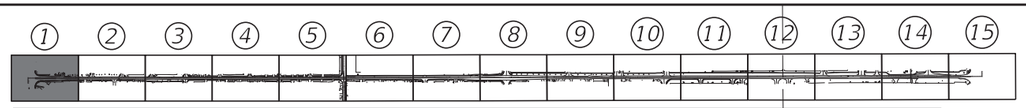
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

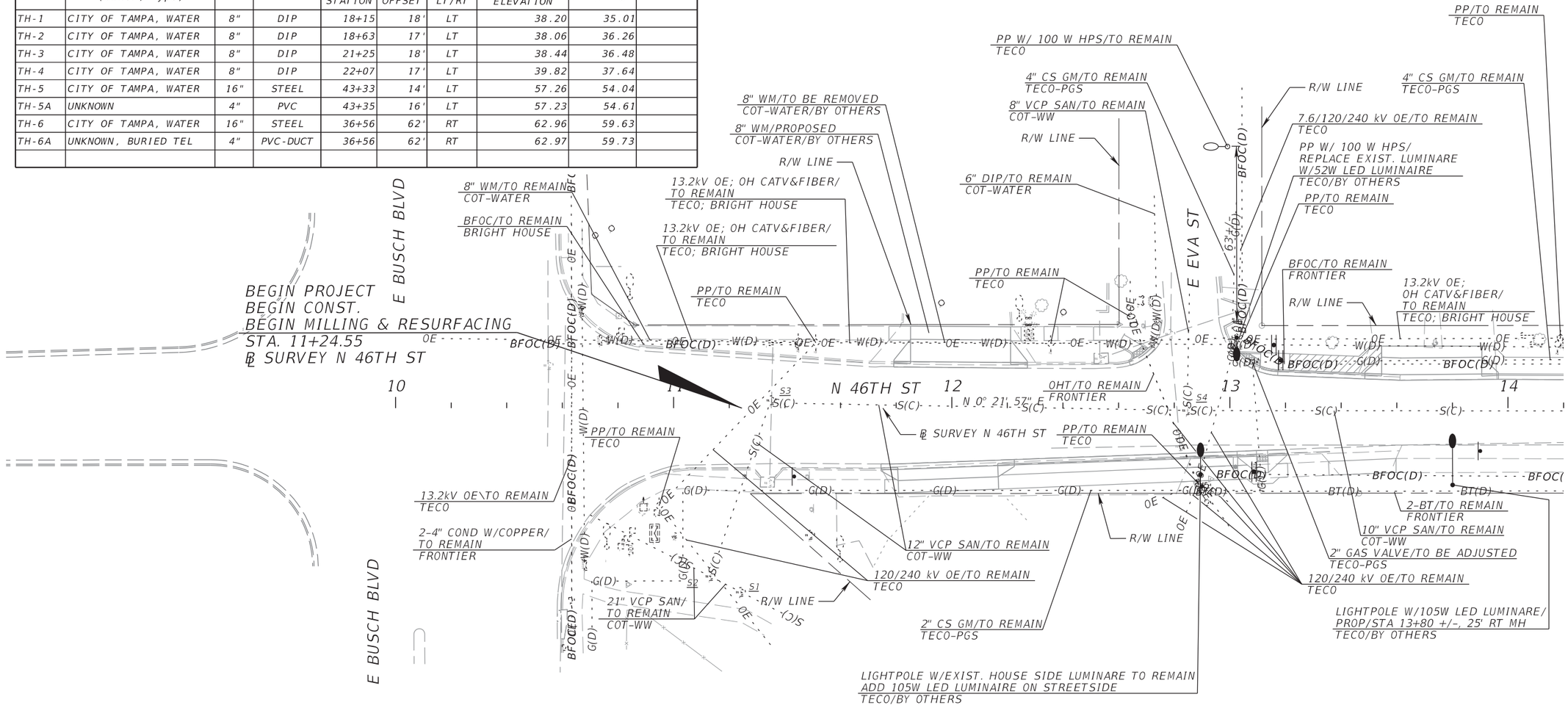
TEMPORARY TRAFFIC CONTROL PLANS (4)

SHEET NO. 75



SUMMARY OF VERIFIED UTILITIES

Vvh #	UTILITY DESCRIPTION (Owner, Type)	SIZE	MATERIALS	BL SURVEY			EXISTING GROUND ELEVATION	TOP ELEVATION	COMMENTS
				STATION	OFFSET	LT/RT			
TH-1	CITY OF TAMPA, WATER	8"	DIP	18+15	18'	LT	38.20	35.01	
TH-2	CITY OF TAMPA, WATER	8"	DIP	18+63	17'	LT	38.06	36.26	
TH-3	CITY OF TAMPA, WATER	8"	DIP	21+25	18'	LT	38.44	36.48	
TH-4	CITY OF TAMPA, WATER	8"	DIP	22+07	17'	LT	39.82	37.64	
TH-5	CITY OF TAMPA, WATER	16"	STEEL	43+33	14'	LT	57.26	54.04	
TH-5A	UNKNOWN	4"	PVC	43+35	16'	LT	57.23	54.61	
TH-6	CITY OF TAMPA, WATER	16"	STEEL	36+56	62'	RT	62.96	59.63	
TH-6A	UNKNOWN, BURIED TEL	4"	PVC-DUCT	36+56	62'	RT	62.97	59.73	



NOTES

1. THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED Vv, Vh AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.

2. CALL THE SUNSHINE STATE ONE CALL AT 811 AND THE UTILITY OWNERS 48 HOURS BEFORE BEGINNING WORK. NOT ALL UTILITIES ARE MEMBERS, WHICH WILL REQUIRE DIRECT CONTACT WITH NON-MEMBERS.

3. PHOTOMETRICS MEETING THE LIGHTING CRITERIA ARE BASED ON A LED LUMINAIRE MADE BY AUTOBAHN WHICH HAS 105 WATTS, 4 -FOOT BRACKET ARM AND MOUNTED AT 25 FEET UNLESS NOTED OTHERWISE. THE MODEL NUMBER IS: ATB○_3○BLEDE_1○_R2_3K WITH INDIVIDUAL PHOTOCELL AND IS POWERED THROUGH AERIAL CONDUCTORS.

4. UTILITY AGENCY OWNERS

COMPANY	CONTACT	TELEPHONE NUMBERS	EMAIL ADDRESS
BRIGHT HOUSE NETWORKS	MARK GIURBINO	813-436-6431	MARK.GIURBINO@CHARTER.COM
CITY OF TAMPA-TRAFFIC	DON GILL	813-393-8499	DON.GILL@TAMPAGOV.NET
CITY OF TAMPA-WASTEWATER	RICHARD RIVERA	813-274-8957	RICHARD.RIVERA@TAMPAGOV.NET
CITY OF TAMPA WATER	RYNALDO DESHAUTEURS	813-724-7221	WATERUTILITYCOORDINATION@TAMPAGOV.NET
CROWN CASTLE FIBER	DANNY HASKETT	786-610-7073	DANNY.HASKETT@CROWNCASTLE.COM
FRONTIER COMMUNICATIONS	KRAIVUTH CHOEKRAJANG	813-875-1014	KRAIVUTH.CHOEYKRAJANG@FTR.COM
MCI	EFRAIN RODRIGUEZ	469-886-4238	INVESTIGATIONS@VERIZON.NET
TECO-ENERGY	HEATHER LOVETT	813-275-3433	CSADMIN@TECOENERGY.COM
TECO-PEOPLES GAS	JAMES HAMILTON	813-275-3732	JKHAMILTON@TECOENERGY.COM
UNITI FIBER	DAVID WOODS	813-539-1180	DAVID.WOODS@UNITI.COM

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

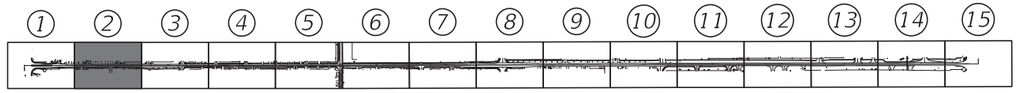
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

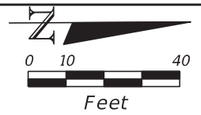
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

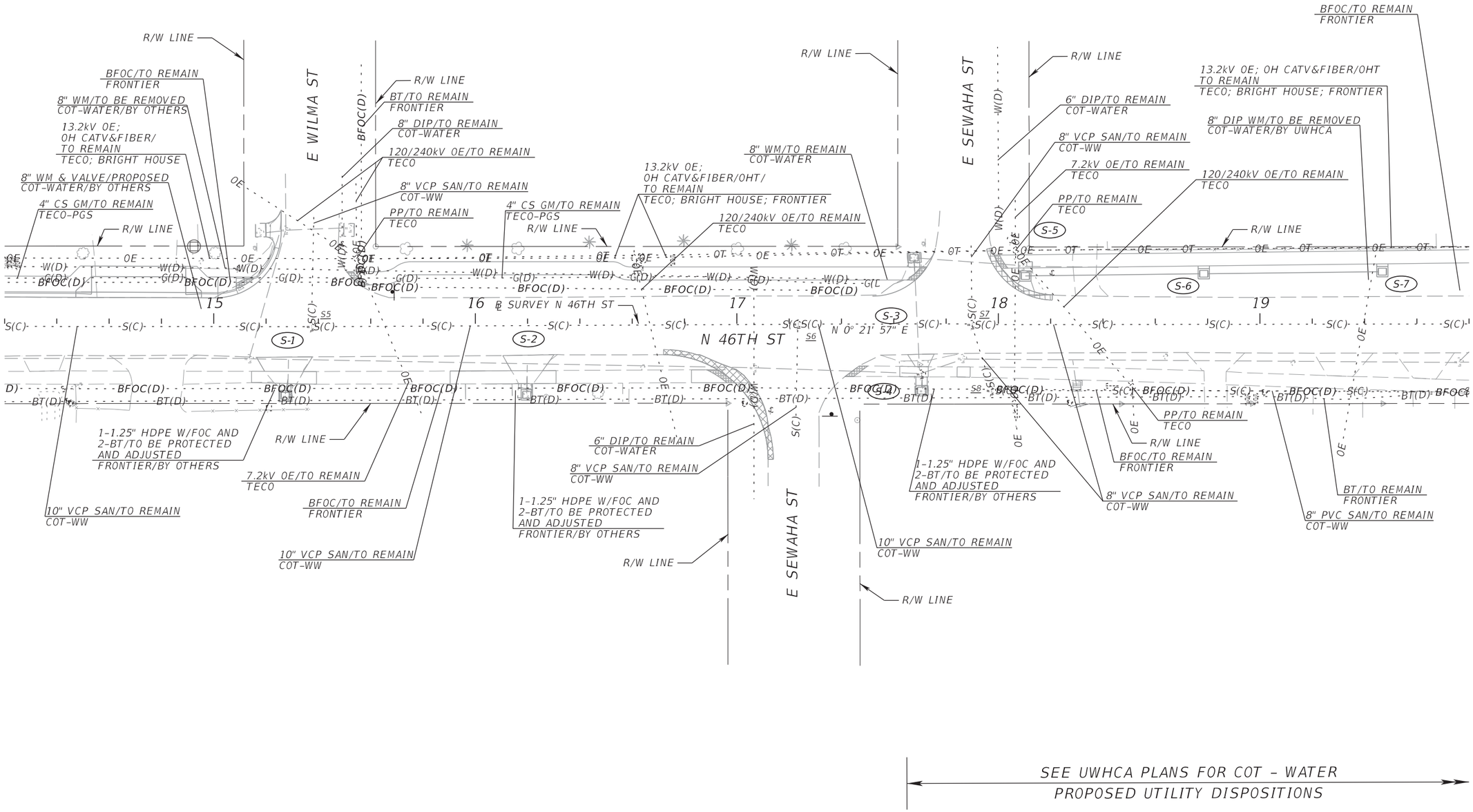
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (1)

SHEET NO. 76







SEE UWHCA PLANS FOR COT - WATER
PROPOSED UTILITY DISPOSITIONS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

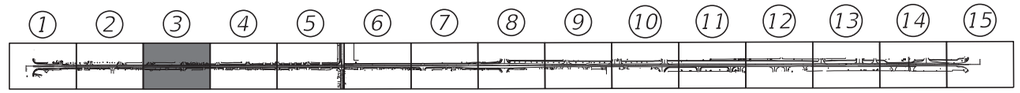
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

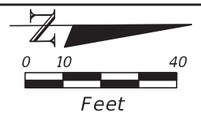
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

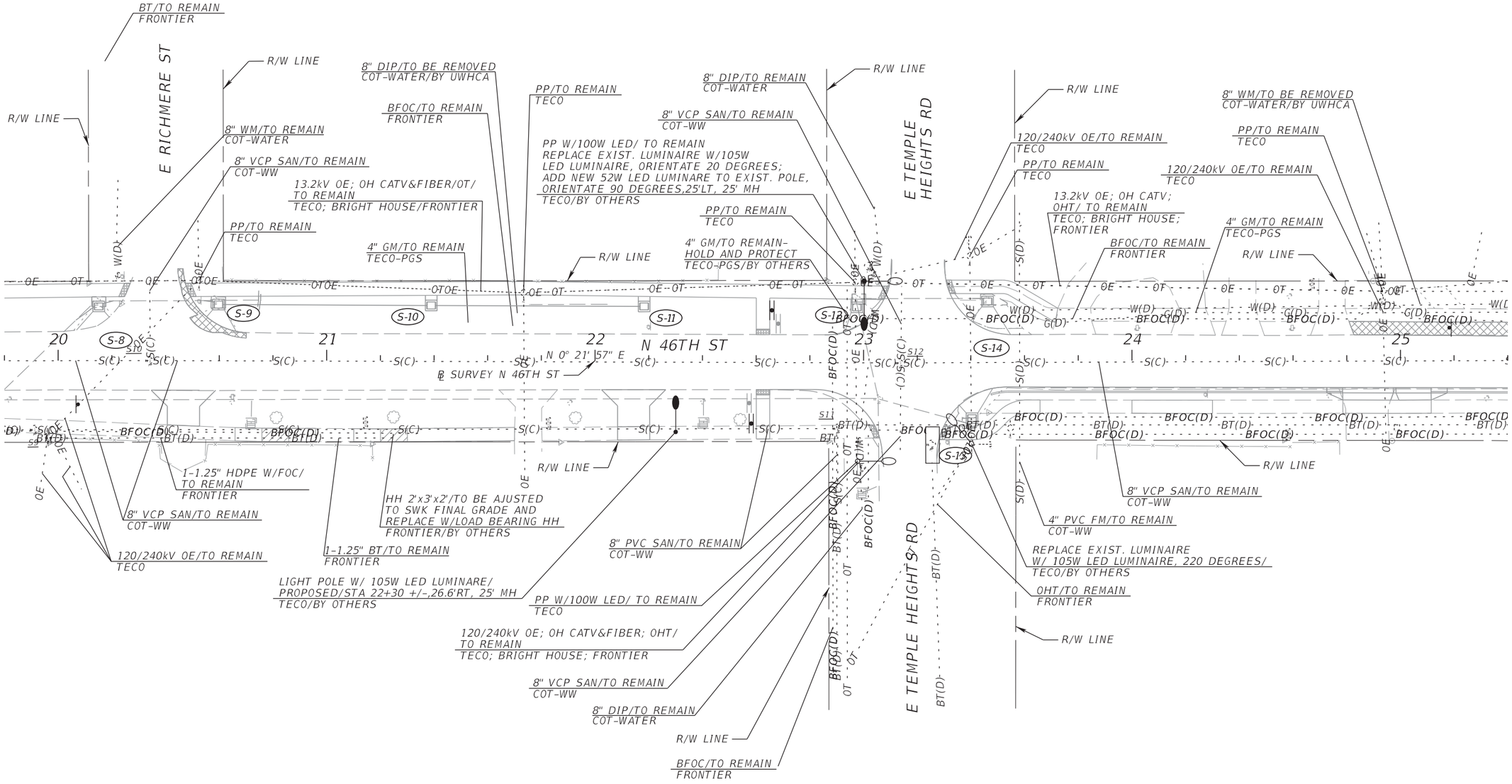
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (2)

SHEET NO. 77







SEE UWHCA PLANS FOR COT - WATER

PROPOSED UTILITY DISPOSITIONS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

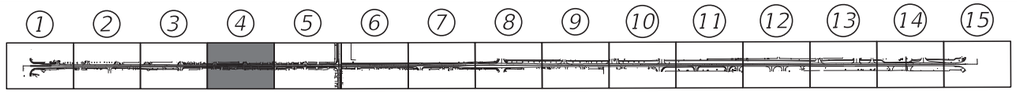
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

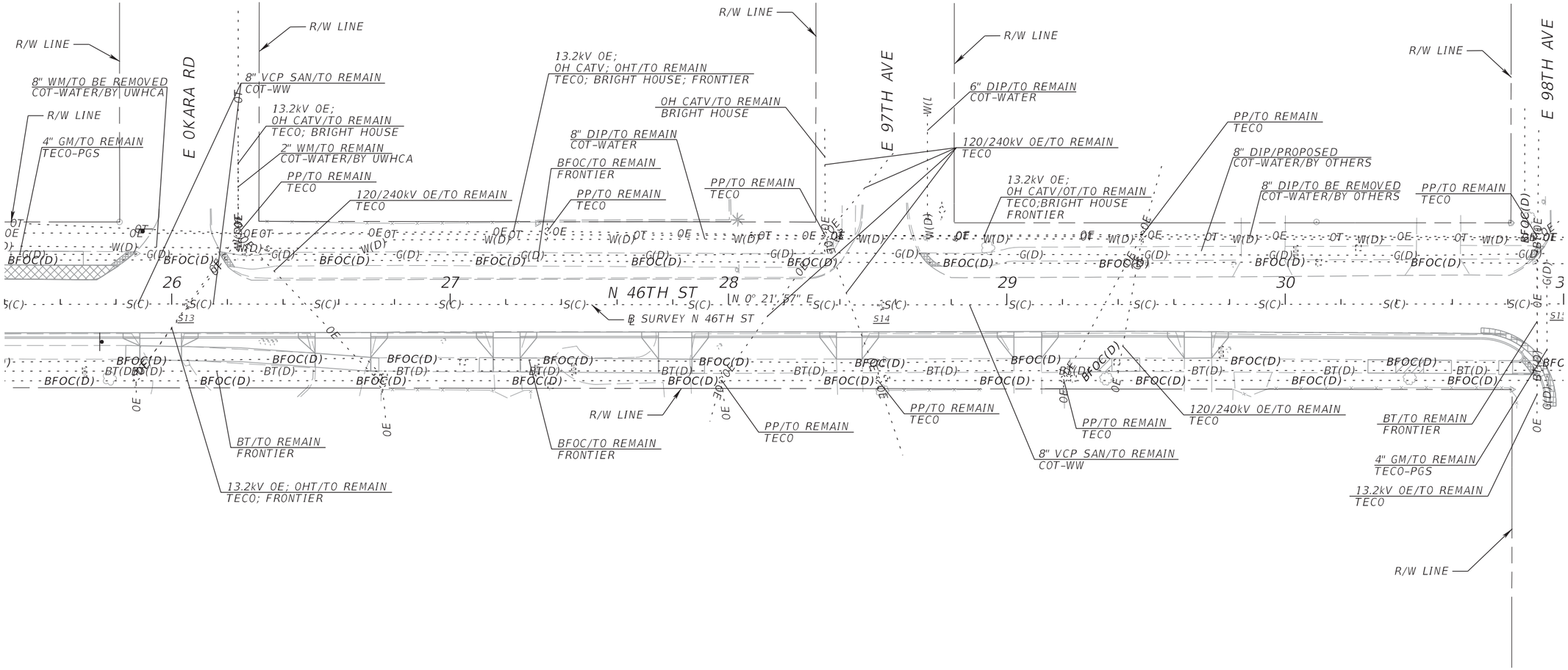
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (3)

SHEET NO. 78





SEE UWHCA PLANS FOR
COT – WATER PROPOSED
UTILITY DISPOSITIONS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

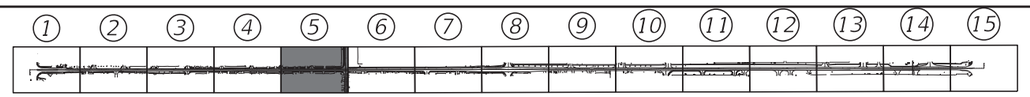
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (4)

SHEET NO. 79



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (5)

SHEET NO. 80

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

0 10 40
Feet

16" WM/TO REMAIN
COT-WATER

R/W LINE

ADD LIGHTPOLE W/105W LED LUMINARE
STA 36+70 +/-, 55 LT, 25' MH
TECO/BY OTHERS

13.2kV OE/TO REMAIN
TECO

8" DIP/PROPOSED
COT-WATER/BY OTHERS

8" WM/TO BE REMOVED
COT-WATER/BY OTHERS

PP/TO REMAIN
REPLACE EXIST. LUMINAIRE
W/105W LED LUMINAIRE
TECO/BY OTHERS

S-17 S-18 S-21 S-19

END RECONSTRUCTION
BEGIN MILLING & RESURFACING
STA. 37+65.21
℄ SURVEY N 46TH ST

13.2kV OE/TO REMAIN
TECO

R/W LINE

PP/TO REMAIN
TECO

16" WM/TO REMAIN
COT-WATER

13.2kV OE/TO REMAIN
TECO

13.2kV OE/TO REMAIN
TECO

PP/TO REMAIN
TECO

37 38 39 40 41 42

N 0° 13' 06" E
℄ SURVEY N 46TH ST

N 46TH ST

13.2kV OE; OH CATV/
TO BE ADJUSTED
TECO; BRIGHT HOUSE
BY OTHERS

PP/TO REMAIN
TECO

8" WM/PROPOSED
COT-WATER/BY OTHERS

1-1.25" HDPE & 1 BT/
TO BE ADJUSTED
FRONTIER/BY OTHERS

ADD LIGHTPOLE
W/105W LED LUMINARE
STA 36+85 +/-, 24 RT, 25' MH
TECO/BY OTHERS

8" VCP SAN/TO REMAIN
COT-WW

SAN MH/TO BE ADJUSTED
CITY OF TAMPA-WASTEWATER

12" WM/PROPOSED
COT-WATER/BY UWHCA

1-4" BFOC/TO BE ADJUSTED
FRONTIER/BY OTHERS

ADD LIGHTPOLE W/105W LED LUMINAIRE
STA 105+96 +/-, 25' LT, 25' MH
TECO/BY OTHERS

R/W LINE

12 DIP/TO BE ADJUSTED
COT-WATER

R/W LINE

13.2kV OE; OH CATV/
TO REMAIN
TECO; BRIGHT HOUSE

(1) 1.25" BFOC/TO REMAIN
FRONTIER

(3) 4" COND W/CABLE/TO REMAIN
FRONTIER

8" VCP SAN/TO REMAIN
COT-WW

PP/TO REMAIN
TECO

13.2kV OE; OH CATV/
TO REMAIN
TECO; BRIGHT HOUSE

120/240kV OE/TO REMAIN
TECO

PP/TO REMAIN
TECO

13.2kV OE; OH CATV/
TO REMAIN
TECO; BRIGHT HOUSE

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

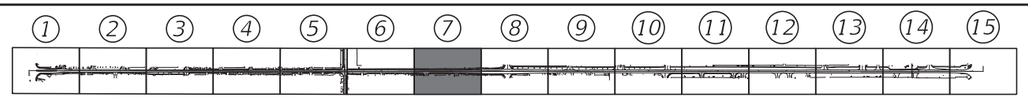
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (6)

SHEET NO. 81



0 10 40
Feet

13.2kV OE/TO REMAIN
TECO
16" WM/TO REMAIN
COT-WATER
PP/TO REMAIN
TECO
120/240 kV SPAN GUY/TO REMAIN
TECO
R/W LINE
13.2kV OE/TO REMAIN
TECO
PP/TO REMAIN
TECO
13.2kV OE/TO REMAIN
TECO
8" VCP SAN/TO REMAIN
COT-WW
PP/TO REMAIN
TECO
13.2kV OE/TO REMAIN
TECO
OE
W(D)
S(C)
BFOC(D)
43
44
45
46
47
S-22
S-23
S-24
S-25
S20
S21
S22
℄ SURVEY N 46TH ST
N 0° 13' 06" E
N 46TH ST
E POINSETTIA AVE
E NAVAJO AVE
R/W LINE
13.2kV OE; OH CATV/
TO REMAIN
TECO; BRIGHT HOUSE
8" VCP SAN/TO REMAIN
COT-WW
8" DIP/TO REMAIN
COT-WATER
PP/TO REMAIN
TECO
8" VCP SAN/TO REMAIN
COT-WW
(4) 4" COND W/CABLE/
TO REMAIN
FRONTIER
13.2kV OE; OH CATV/
TO REMAIN
TECO; BRIGHT HOUSE
PP/TO REMAIN
TECO
(1) 1.25" BFOC/TO REMAIN
FRONTIER
8" VCP SAN/TO REMAIN
COT-WW
6" DIP/TO REMAIN
COT-WATER
4-4" CONDUIT AND
1-1.25" HDPE W/CABLES
TO BE AJUSTED
FRONTIER/BY OTHERS
13.2kV OE; OH CATV&FOC/
TO REMAIN
TECO; BRIGHT HOUSE

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

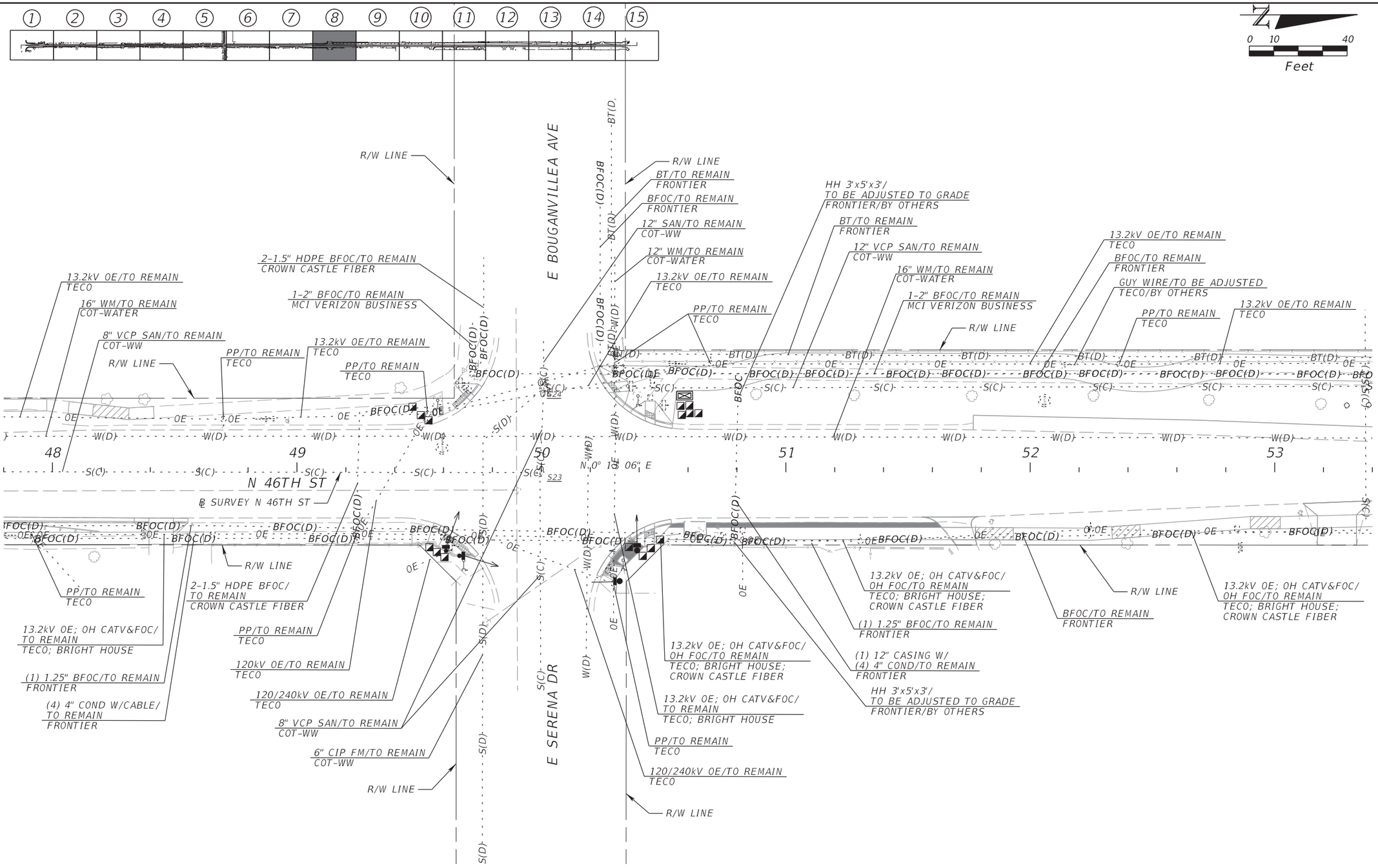
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (7)

SHEET NO. 82



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

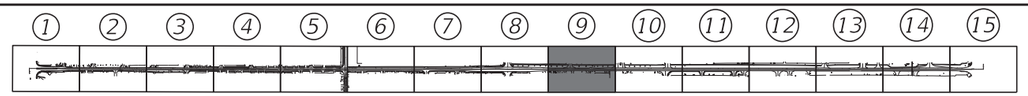
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (8)

SHEET NO. 83



0 10 40
Feet

BT/TO REMAIN
FRONTIER

(1) 4" PVC BFOC/TO REMAIN
FRONTIER

16" WM/TO REMAIN
COT-WATER

PP/TO REMAIN
TECO

13.2kV OE/TO REMAIN
TECO

1-2" BFOC/TO REMAIN
MCI VERIZON BUSINESS

13.2kV OE/TO REMAIN
TECO

12" VCP SAN/TO REMAIN
COT-WW

R/W LINE

BFOC(D)

SAN MH/TO BE ADJUSTED
CITY OF TAMPA-WASTEWATER

PP/TO REMAIN
TECO

12" VCP SAN/TO REMAIN
COT-WW

4" GM/TO REMAIN
TECO-PGS

HH 2'x3'x2'/TO BE ADJUSTED
FRONTIER/BY OTHERS

13.2kV OE/TO REMAIN
TECO

8" PVC SAN/TO REMAIN
PRIVATE

SAN MH/TO BE ADJUSTED
CITY OF TAMPA-WASTEWATER

BT(D) OE BFOC(D) S(C) G(D) W(D)

S25 S26 S27 S28 S29

54 55 56 57 58 59

N 0° 13' 06" E

℄ SURVEY N 46TH ST

N 46TH ST

E SENECA AVE

PP/TO REMAIN
TECO

R/W LINE

13.2kV OE; OH CATV&FOC/
OH FOC/TO REMAIN
TECO; BRIGHT HOUSE;
CROWN CASTLE FIBER

BT/TO REMAIN
FRONTIER

(1) 1.25" BFOC/TO REMAIN
FRONTIER

13.2kV OE; OH CATV&FOC/
OH FOC/TO REMAIN
TECO; BRIGHT HOUSE;
CROWN CASTLE FIBER

PP/TO REMAIN
TECO

R/W LINE

PP/TO REMAIN
TECO

13.2kV OE; OH CATV&FOC/
OH FOC/TO REMAIN
TECO; BRIGHT HOUSE;
CROWN CASTLE FIBER

8" DIP/TO REMAIN
COT-WATER

8" DIP SAN/TO REMAIN
COT-WW

R/W LINE

13.2kV OE; OH CATV&FOC/
OH FOC/TO REMAIN
TECO; BRIGHT HOUSE;
CROWN CASTLE FIBER

PP/TO REMAIN
TECO

8" VCP SAN/TO REMAIN
COT-WW

PP/TO REMAIN
TECO

13.2kV OE; OH CATV&FOC/
OH FOC/TO REMAIN
TECO; BRIGHT HOUSE;
CROWN CASTLE FIBER

GUY OH/TO REMAIN
TECO

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

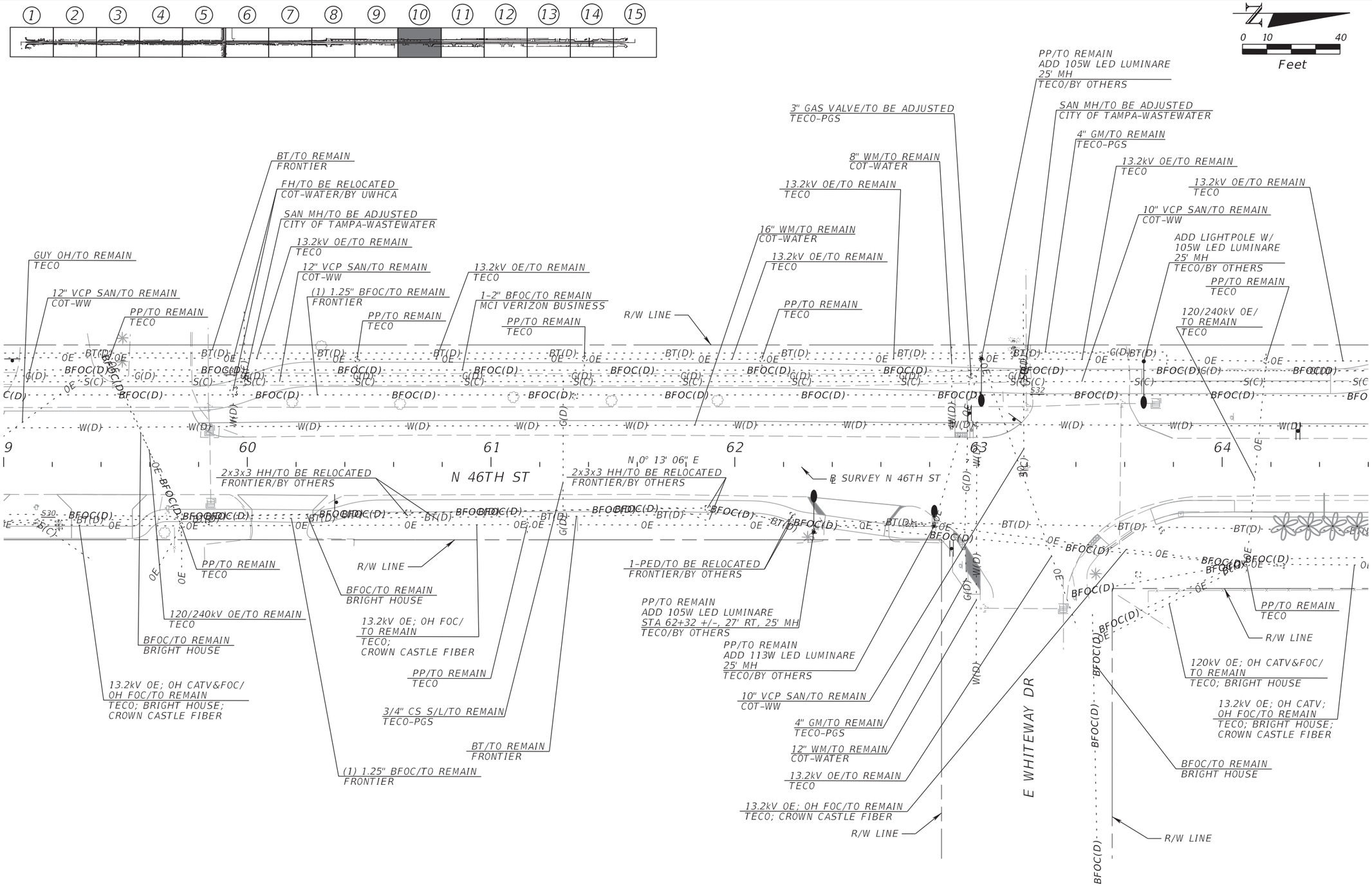
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (9)

SHEET NO. 84



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

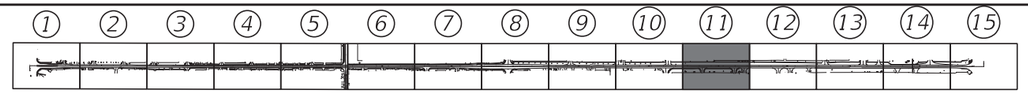
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

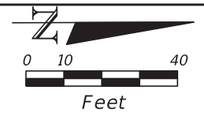
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

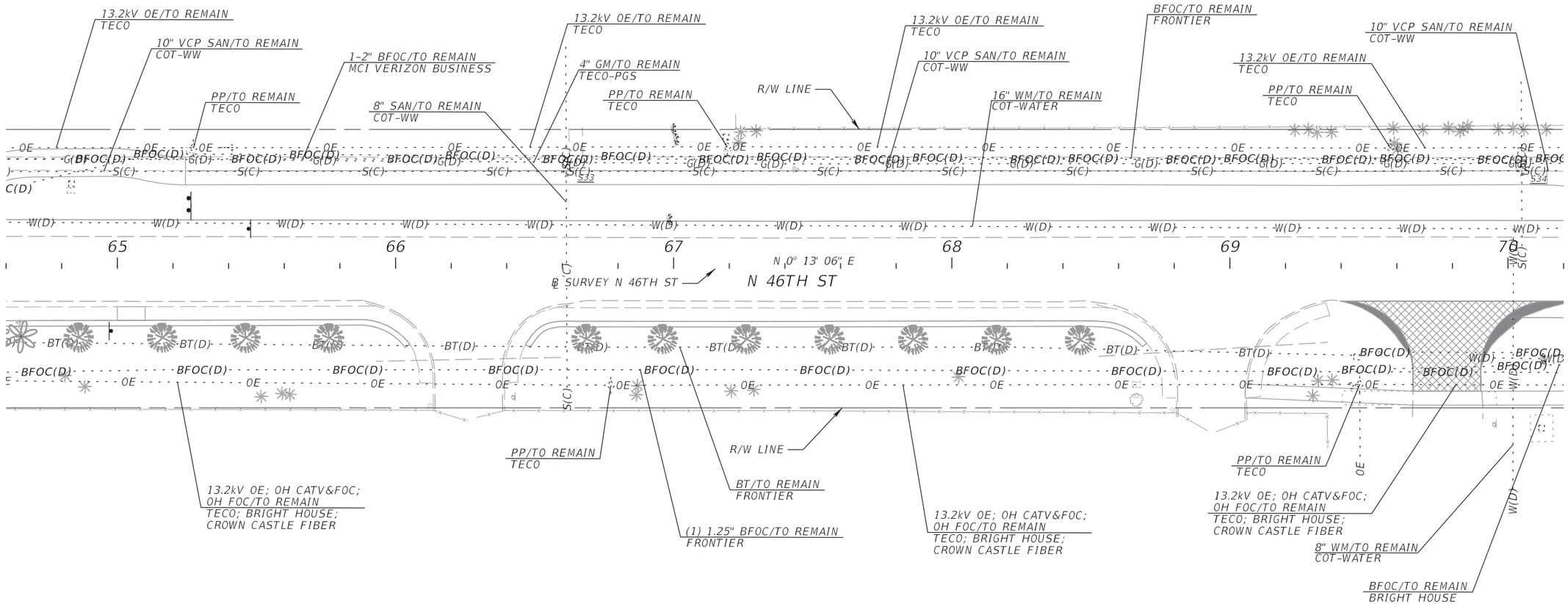
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (10)

SHEET NO. 85







REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

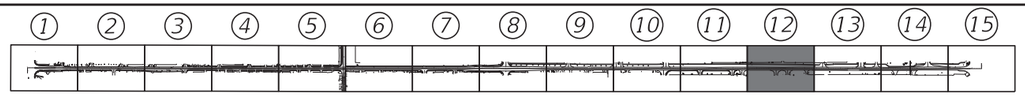
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

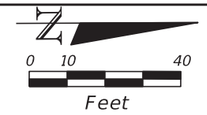
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

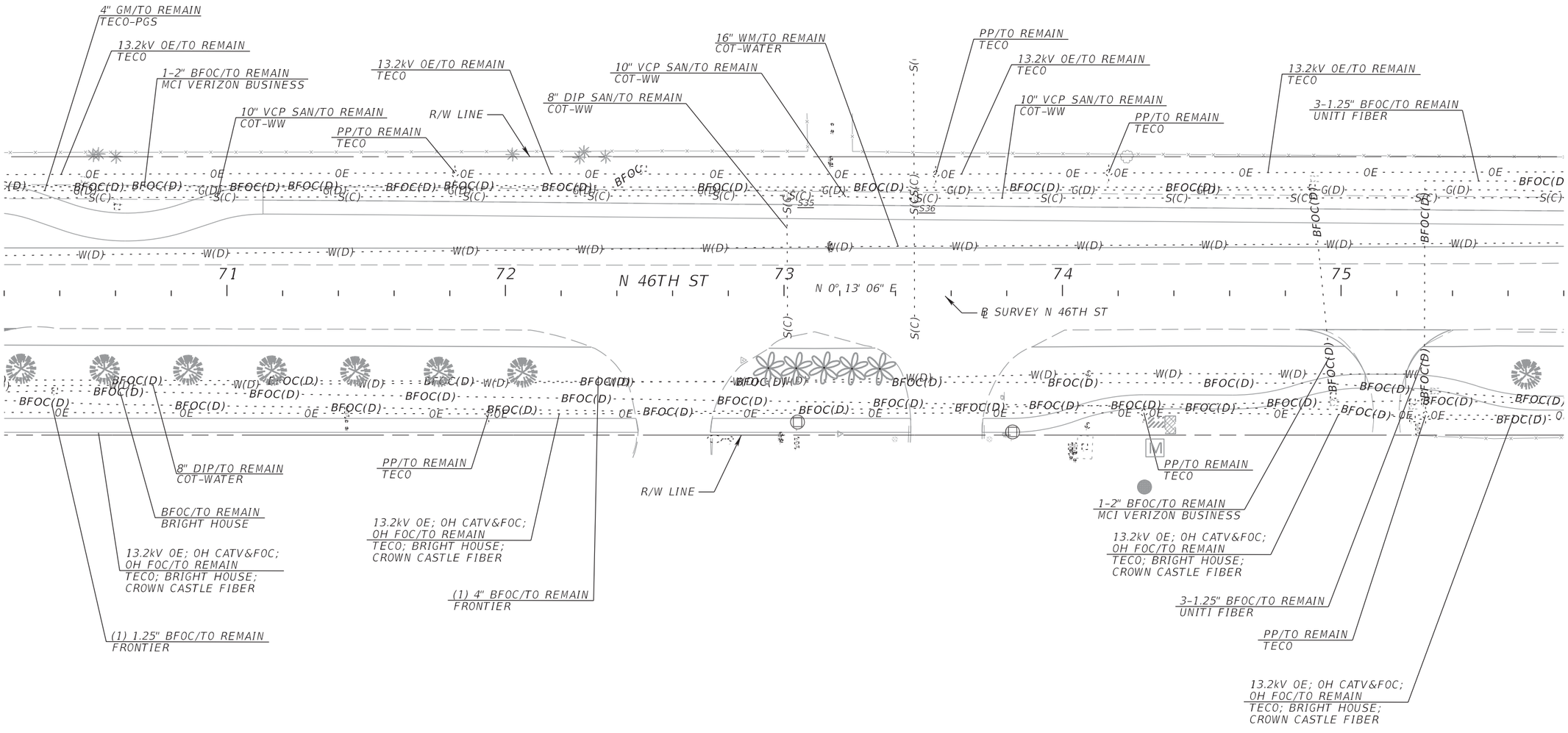
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (11)

SHEET NO. 86







REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

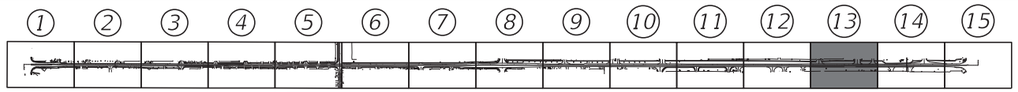
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

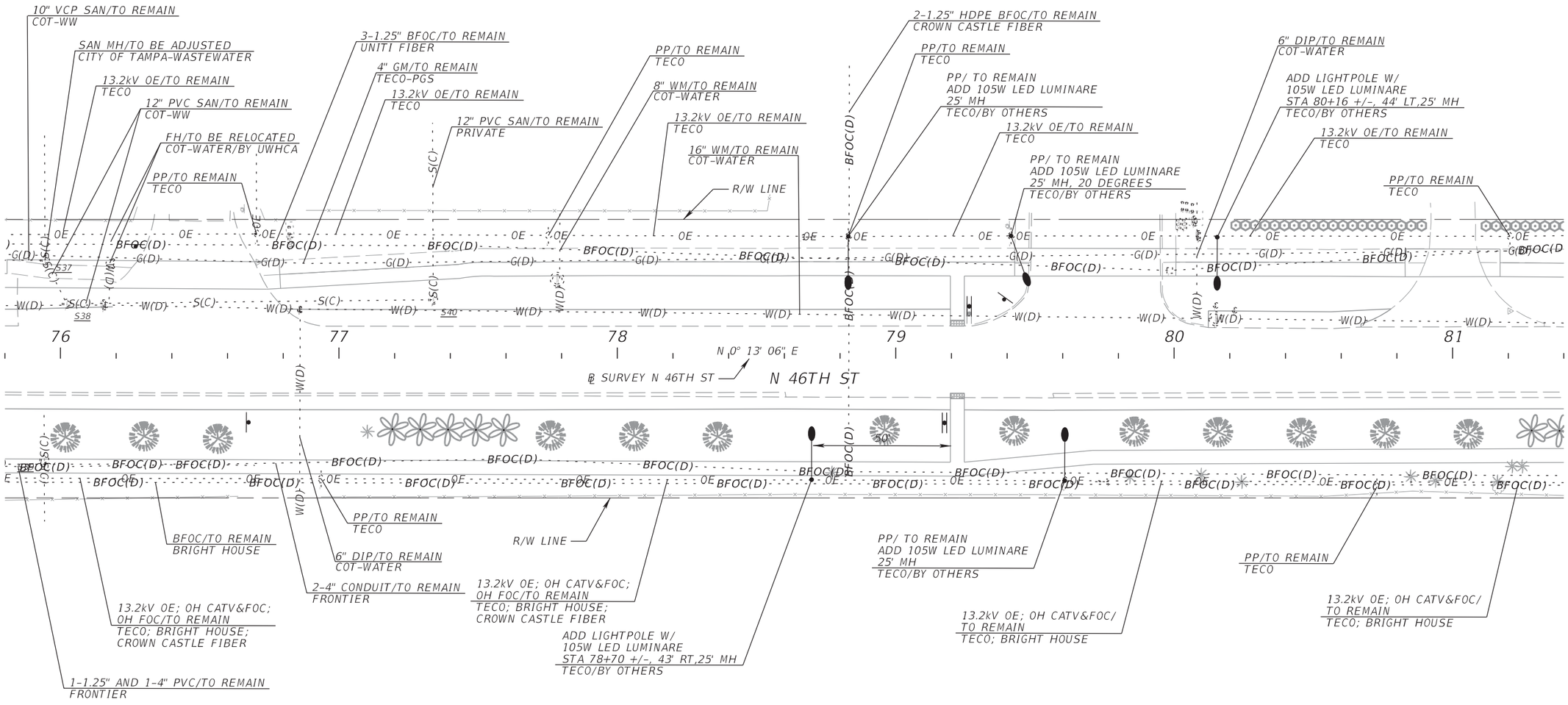
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (12)

SHEET NO. 87





THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

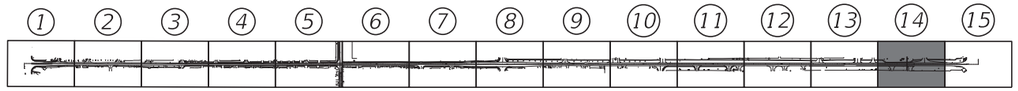
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

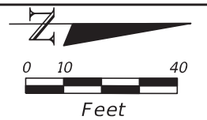
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

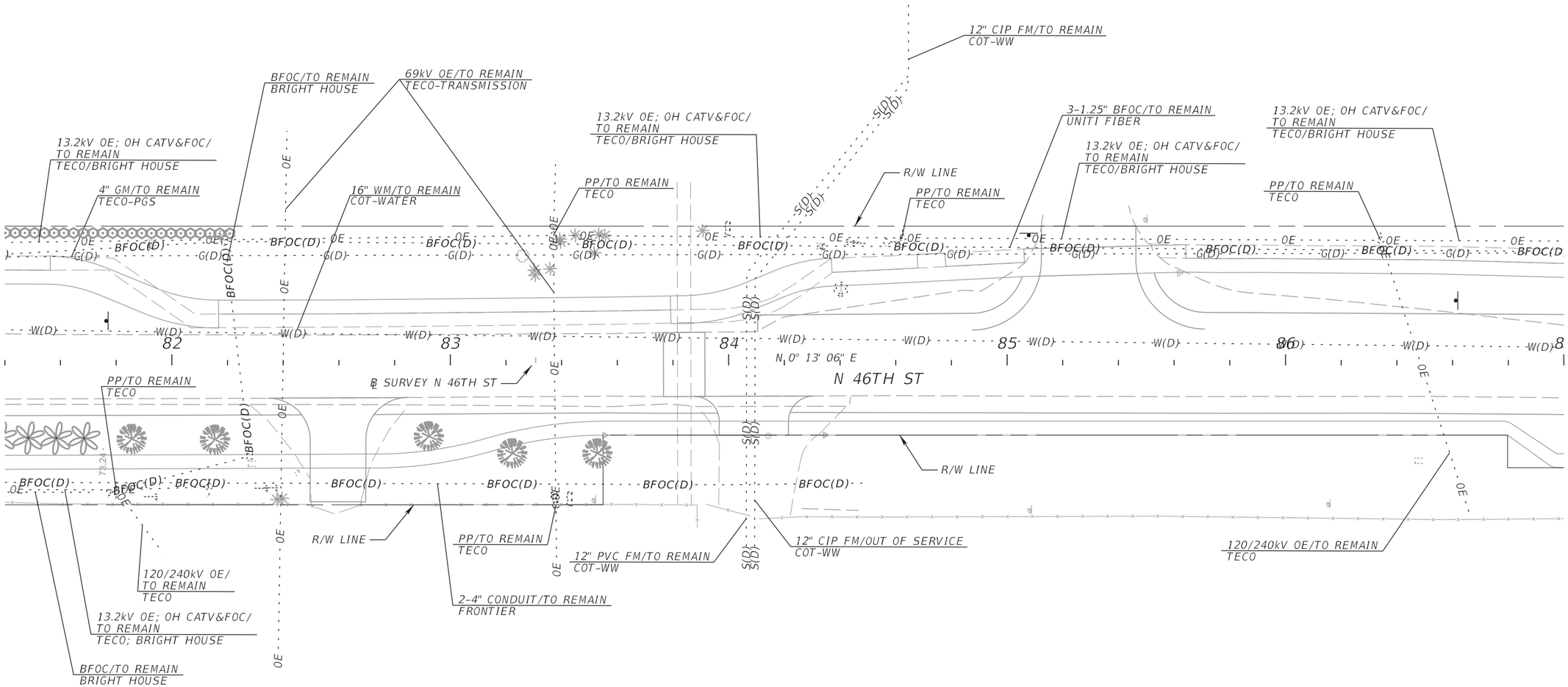
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (13)

SHEET NO. 88







REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

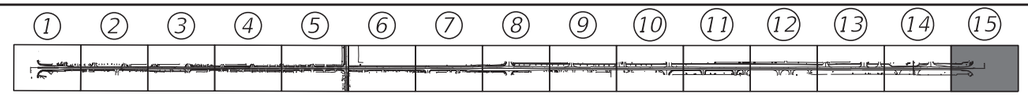
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

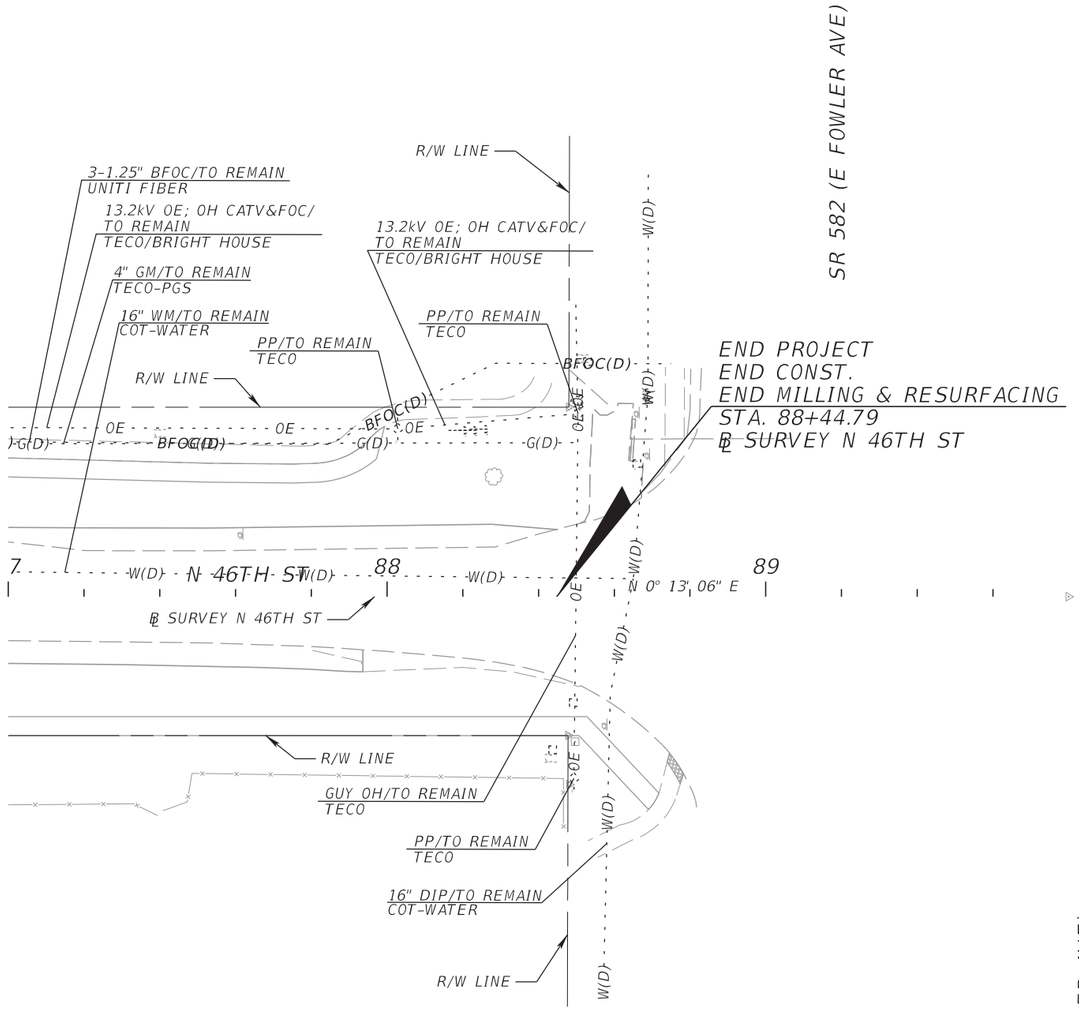
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

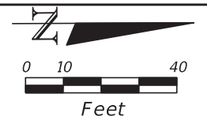
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (14)

SHEET NO. 89







S1
RIM 41.55'
NE 18" PVC 25.28'
SW 18" PVC 25.26'

S2
RIM 41.57'
NW 12" PVC 25.76'
NE 18" PVC 25.03'
SW 18" PVC 25.03'

S3
RIM 39.91'
N 12" PVC 26.08'
SE 12" PVC 25.92'

S4
RIM 40.38'
W 8" PVC 27.86'
N 12" PVC 27.17'
S 12" PVC 26.86'

S5
RIM 38.28'
W 8" PVC 27.89'
N 12" PVC 27.85'
S 12" PVC 27.61'

S6
RIM 38.89'
E 8" PVC 28.49'
N 12" PVC 28.44'
S 12" PVC 28.24'

S7
RIM 38.81'
NE 8" PVC 29.35'
W 8" PVC 28.64'
N 8" VCP 30.09'
N 10" VCP 29.08'
S 10" VCP 28.48'

S8
RIM 38.25'
N 8" PVC 30.69'
SW 8" PVC 29.67'

S9
RIM 39.31'
N 8" PVC 32.26'
S 8" PVC 32.19'

S10
RIM 39.78'
W 8" PVC 31.55'
N 8" VCP 31.16'
S 10" VCP 30.93'

S11
RIM 40.56'
S 8" PVC 34.54'
E 8" PVC 34.52'

S12
RIM 41.57'
W 8" VCP 33.98'
N 8" VCP 33.78'
E 8" VCP 33.68'
S 8" VCP 31.99'

S13
RIM 47.63'
N 8" VCP 42.48'
S 8" VCP 42.44'

S14
RIM 57.39'
N 8" VCP 52.44'
S 8" VCP 52.37'

S15
RIM 66.65'
E 8" VCP 61.13'
S 8" VCP 61.08'

S16
RIM 67.33'
N 8" VCP 61.04'

S17
RIM 63.51'
S 8" VCP 59.01'
N 8" VCP 58.96'

S18
RIM 60.70'
E 8" VCP 56.04'
S 8" VCP 54.30'
E 8" VCP 54.20'
N 8" VCP 53.68'

S19
RIM 58.57'
S 8" VCP 52.71'
N 8" VCP 52.72'

S20
RIM 57.76'
S 8" VCP 51.63'
E 8" VCP 52.27'
N 8" VCP 51.75'

S21
RIM 56.94'
S 8" VCP 50.96'
E 8" VCP 53.02'
E 8" VCP 51.42'
N 8" VCP 50.74'

S22
RIM 56.49'
S 8" VCP 50.30'
N 8" VCP 50.25'

S23
RIM 57.35'
S 8" VCP 50.35'
E 12" VCP 49.23'
W 12" VCP 49.38'

S24
RIM 56.75'
E 12" VCP 48.89'
W 12" VCP 48.60'
N 12" VCP 48.73'

S25
RIM 56.68'
N 12" VCP 49.57'
S 12" VCP 49.63'
E 8" PVC 51.88'
W 12" VCP 49.78'

S26
RIM 56.68'
N 12" VCP 49.57'
S 12" VCP 49.63'
E 8" PVC 51.88'
W 12" VCP 49.78'

S27
RIM 58.38'
N 12" VCP 52.73'
S 12" VCP 52.68'
E 8" VCP 54.88'
E 6" VCP 53.25'

S28
RIM 58.63'
E 8" VCP 53.66'
NW 8" VCP 53.74'

S29
RIM 58.92'
W 8" VCP 55.23'
SE 6" VCP 55.37'
N 8" PVC 55.26'

S30
RIM 59.65'
S 8" VCP 55.51'
NE 6" VCP 55.76'

S31
RIM 59.82'
N 12" VCP 53.31'
S 12" VCP 53.43'
W 8" VCP 53.79'

S32
RIM 62.89'
N 12" VCP 55.22'
S 12" VCP 55.08'
E 12" VCP 55.39'
W 12" VCP 55.31'

S33
RIM 65.25'
N 12" VCP 57.04'
S 12" VCP 57.04'
E 12" VCP 57.04'
W 12" VCP 57.02'

S34
RIM 69.61'
N 12" VCP 58.89'
S 12" VCP 58.87'
E 12" VCP 59.06'
W 12" VCP 59.14'

S35
RIM 72.83'
N 12" VCP 60.56'
S 12" VCP 60.55'
E 12" PVC 61.07'

S36
RIM 73.28'
N 12" VCP 60.86'
S 12" VCP 60.82'
E 12" VCP 61.02'
W 12" VCP 60.93'

S37
RIM 71.36'
NE 12" PVC 62.46'
S 12" VCP 62.19'
W 8" VCP 62.94'

S38
RIM 71.21'
N 12" PVC 62.41'
SW 12" PVC 62.26'

S39
RIM 72.27'
E 8" PVC 63.76'
W 4" VCP 63.98'

S40
RIM 68.29'
W 12" PVC 62.67'
S 12" PVC 62.32'

S41
RIM 71.25'
W 8" VCP 63.72'
E 8" VCP 63.76'

S42
RIM 72.02'
W 8" VCP 64.48'
E 8" VCP 64.53'

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

UTILITY ADJUSTMENTS (15)

SHEET NO. 90

INDEX OF SUMMARY OF QUANTITY SHEETS

SHEET NO.	SHEET NO.
SQ-1	SUMMARY OF LUMP SUM ITEMS
	SUMMARY OF TEMPORARY TRAFFIC CONTROL PLANS
	SUMMARY OF TEMPORARY SIGNALIZATION & DETECTION
SQ-2	SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES
SQ-3 - SQ-6	SUMMARY OF LITTER REMOVAL AND MOWING
SQ-7 - SQ-10	SUMMARY OF CLEARING AND GRUBBING & REMOVAL ITEMS
SQ-11	SUMMARY OF MAILBOXES
SQ-12 - SQ-13	SUMMARY OF PAVEMENT
SQ-14	SUMMARY OF MISCELLANEOUS DRAINAGE ITEMS
SQ-15	SUMMARY OF UTILITY ADJUSTMENTS
SQ-16	SUMMARY OF RAILINGS
	SUMMARY OF CURB & GUTTER AND/OR TRAFFIC SEPARATORS
SQ-17 - SQ-20	SUMMARY OF SIDEWALK & DETECTABLE WARNINGS
SQ-21	SUMMARY OF GUARDRAIL
	SUMMARY OF FENCING
SQ-22 - SQ-24	SUMMARY OF PERFORMANCE TURF

PAY ITEM NOTES

SHEET NO.	
0110 1	REMOVAL OF EXIST. TREES AND RAILROAD WITHIN R/W LIMITS INCLUDED IN SUMMARY OF CLEARING AND GRUBBING.
	REMOVE, PRESERVE, AND DELIVER RAILROAD RAILINGS TO A DESIGNATED LOCATION WITHIN 15 MILES OF PROJECT LIMITS.
0104 10 3	SEDIMENT BARRIERS THROUGH SIDE STREETS WITHIN STA. RANGE LIMITS TO BE CUT AT CENTER OF SIDE STREET AND WRAP AROUND SIDE STREET RETURNS.

SUMMARY OF LUMP SUM ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	QUANTITY P	QUANTITY F	DESIGN NOTES	CONSTRUCTION REMARKS
0101 1	MOBILIZATION	1			

SUMMARY OF TEMPORARY TRAFFIC CONTROL PLAN ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	PHASE I DURATION DAYS	PHASE I QUANTITY P	PHASE I TOTAL P	PHASE II DURATION DAYS	PHASE II QUANTITY P	PHASE II TOTAL P	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0102 1	MAINTENANCE OF TRAFFIC	LS		1			1		1		460 CONST. DAYS	

SUMMARY OF TEMPORARY TRAFFIC CONTROL PLAN ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	PHASE III DURATION DAYS	PHASE III QUANTITY P	PHASE III TOTAL P	PHASE IV DURATION DAYS	PHASE IV QUANTITY P	PHASE IV TOTAL P	TOTAL P	TOTAL F	GRAND TOTAL P	GRAND TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0102 1	MAINTENANCE OF TRAFFIC	LS		1			1		1		1		460 CONST. DAYS	

SUMMARY OF TEMPORARY SIGNALIZATION & DETECTION

PHASE	DURATION	0102104 TEMPORARY SIGNALS & MAINTENANCE OF INTERSECTION - EACH DAY						0102107 1 TEMPORARY TRAFFIC DETECTION & MAINTENANCE OF INTERSECTION - EACH DAY						DESIGN NOTES	CONSTRUCTION REMARKS
		EXISTING			TEMPORARY			EXISTING			TEMPORARY/NEW				
	DAYS	#	P	F	#	P	F	#	P	F	#	P	F		
1 THRU 4	460	1	460		1	460		1	460		1	460			
SUB-TOTAL			460			460			460			460			
TOTAL						920					TOTAL	920			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-1

SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES

LOCATION	SIDE	SEDIMENT BARRIER		INLET PROTECTION SYSTEM		DESIGN NOTES	CONSTRUCTION REMARKS
		0104 10 3		0104 18			
STA. TO STA.		LF		EA			
		P	F	P	F		
12+50.00 to 16+30.00	LT	380					
14+60.00 to 25+20.00	RT	1060					
18+30.00 to 23+60.00	LT	530					
36+40.00 to 37+00.00	LT	60				ADJ. TO PROP. DITCH	
54+80.00 to 74+50.00	LT	1970					
75+50.00 to 85+00.00	RT	950					
77+00.00 to 78+60.00	LT	160					
80+00.00 to 83+20.00	LT	320					
87+40.00 to 88+40.00	LT	100					
11+34.46	RT			1		EXIST. INLET	
12+53.21	LT			1		EXIST. INLET	
13+05.18	LT			1		EXIST. INLET	
15+17.60	LT			1		EXIST. INLET	
15+27.33	RT			1			
15+28.42	RT			1		EXIST. INLET	
15+52.05	LT			1		EXIST. INLET	
16+19.68	RT			1			
16+19.68	RT			1		EXIST. INLET	
17+67.76	LT			1			
17+67.76	LT			1		EXIST. INLET	
17+70.64	RT			1			
17+70.64	RT			1		EXIST. INLET	
18+10.32	LT			1			
18+10.32	LT			1		EXIST. INLET	
18+10.32	LT			1			
18+10.32	LT			1		EXIST. INLET	
18+30.05	RT			1		EXIST. INLET	
18+78.58	LT			1			
19+46.83	LT			1			
20+15.17	LT			1		EXIST. INLET	
20+15.17	LT			1			
20+59.70	LT			1		EXIST. INLET	
20+59.70	LT			1			
20+71.86	RT			1		EXIST. INLET	
21+38.98	LT			1			
22+18.26	LT			1			
22+40.43	RT			1		EXIST. INLET	
22+97.54	LT			1			
22+97.54	LT			1		EXIST. INLET	
22+99.44	RT			1		EXIST. INLET	
23+40.43	RT			1		EXIST. INLET	
23+40.43	RT			1			
23+46.18	LT			1		EXIST. INLET	
23+46.18	LT			1			
35+85.82	LT			1			
35+86.04	RT			1			
36+55.77	RT			1			
36+88.72	RT			1			
SUB-TOTAL:		5530		37			
TOTAL:		5530		53			

SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES

LOCATION	SIDE	SEDIMENT BARRIER		INLET PROTECTION SYSTEM		DESIGN NOTES	CONSTRUCTION REMARKS
		0104 10 3		0104 18			
STA. TO STA.		LF		EA			
		P	F	P	F		
42+77.83	RT			1		EXIST. INLET	
42+77.83	RT			1			
43+16.79	LT						
43+20.66	LT			1		EXIST. INLET	
47+49.97	LT			1		EXIST. INLET	
47+49.97	LT			1			
47+53.96	RT			1		EXIST. INLET	
47+53.96	RT			1			
50+64.73	RT			1		EXIST. INLET	
53+49.97	LT			1		EXIST. INLET	
53+50.71	RT			1		EXIST. INLET	
56+93.38	LT			1		EXIST. INLET	
57+16.34	RT			1		EXIST. INLET	
59+84.57	LT			1		EXIST. INLET	
59+85.05	RT			1		EXIST. INLET	
63+34.84	RT			1		EXIST. INLET	
63+72.85	LT			1		EXIST. INLET	
SUB-TOTAL:				16.0			

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST. SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-2

SUMMARY OF LITTER REMOVAL AND MOWING

CONST. PHASE	LOCATION	SIDE	DURATION (DAYS)	FREQUENCY (DAYS)	LITTER REMOVAL 0107 1					MOWING 0107 2					DESIGN NOTES	CONSTRUCTION REMARKS
	STA. TO STA.				CYCLES	AREA (SY)	AREA AC/CYCLE	AREA TOTAL (AC) P	AREA TOTAL (AC) F	CYCLES	AREA (SY)	AREA AC/CYCLE	AREA TOTAL (AC) P	AREA TOTAL (AC) F		
1 THRU 4	10+71.12 to 11+81.73	LT	460	30	15	7	0.001	0.022		15	7.0	0.001	0.022			
1 THRU 4	10+82.48 to 11+77.42	LT	460	30	15	49	0.010	0.150		15	48.5	0.010	0.150			
1 THRU 4	10+96.67 to 11+31.25	RT	460	30	15	8	0.002	0.024		15	7.9	0.002	0.024			
1 THRU 4	11+36.46 to 11+76.83	RT	460	30	15	14	0.003	0.043		15	14.0	0.003	0.043			
1 THRU 4	12+21.65 to 12+76.73	LT	460	30	15	18	0.004	0.055		15	17.7	0.004	0.055			
1 THRU 4	12+24.97 to 12+70.74	LT	460	30	15	33	0.007	0.103		15	33.2	0.007	0.103			
1 THRU 4	12+84.47 to 13+35.47	RT	460	30	15	19	0.004	0.059		15	18.9	0.004	0.059			
1 THRU 4	12+86.84 to 14+47.41	RT	460	30	15	116	0.024	0.359		15	115.8	0.024	0.359			
1 THRU 4	12+97.20 to 13+51.43	LT	460	30	15	97	0.020	0.300		15	96.7	0.020	0.300			
1 THRU 4	13+59.75 to 14+29.61	RT	460	30	15	40	0.008	0.125		15	40.3	0.008	0.125			
1 THRU 4	13+69.83 to 13+76.37	LT	460	30	15	5	0.001	0.017		15	5.4	0.001	0.017			
1 THRU 4	13+94.81 to 14+55.34	LT	460	30	15	129	0.027	0.399		15	128.6	0.027	0.399			
1 THRU 4	14+40.77 to 14+67.41	RT	460	30	15	15	0.003	0.045		15	14.6	0.003	0.045			
1 THRU 4	14+47.14 to 14+68.81	RT	460	30	15	18	0.004	0.055		15	17.6	0.004	0.055			
1 THRU 4	14+85.64 to 15+25.50	LT	460	30	15	44	0.009	0.135		15	43.7	0.009	0.135			
1 THRU 4	14+87.10 to 15+24.95	RT	460	30	15	32	0.007	0.099		15	32.0	0.007	0.099			
1 THRU 4	14+88.63 to 15+19.42	RT	460	30	15	17	0.004	0.054		15	17.3	0.004	0.054			
1 THRU 4	15+24.95 to 16+56.36	RT	460	30	15	102	0.021	0.316		15	102.0	0.021	0.316			
1 THRU 4	15+34.27 to 16+13.75	RT	460	30	15	48	0.010	0.149		15	48.1	0.010	0.149			
1 THRU 4	15+47.73 to 17+77.65	LT	460	30	15	493	0.102	1.527		15	492.7	0.102	1.527			
1 THRU 4	16+25.84 to 16+99.76	RT	460	30	15	42	0.009	0.130		15	41.9	0.009	0.130			
1 THRU 4	16+58.70 to 17+09.86	RT	460	30	15	43	0.009	0.133		15	42.8	0.009	0.133			
1 THRU 4	17+32.77 to 18+78.88	RT	460	30	15	147	0.030	0.456		15	147.2	0.030	0.456			
1 THRU 4	17+47.07 to 17+62.27	RT	460	30	15	4	0.001	0.013		15	4.2	0.001	0.013			
1 THRU 4	17+73.15 to 18+78.62	RT	460	30	15	63	0.013	0.196		15	63.2	0.013	0.196			
1 THRU 4	18+12.99 to 18+12.99	LT	460	30	15	54	0.011	0.166		15	53.6	0.011	0.166			
1 THRU 4	18+37.40 to 20+28.45	LT	460	30	15	383	0.079	1.186		15	382.7	0.079	1.186			
1 THRU 4	18+86.96 to 19+20.43	RT	460	30	15	25	0.005	0.076		15	24.6	0.005	0.076			
1 THRU 4	18+87.14 to 19+25.69	RT	460	30	15	29	0.006	0.089		15	28.8	0.006	0.089			
1 THRU 4	19+35.49 to 19+58.63	RT	460	30	15	16	0.003	0.050		15	16.2	0.003	0.050			
1 THRU 4	19+39.25 to 19+58.59	RT	460	30	15	11	0.002	0.034		15	10.9	0.002	0.034			
1 THRU 4	19+67.38 to 21+70.30	RT	460	30	15	289	0.060	0.896		15	289.1	0.060	0.896			
1 THRU 4	21+78.06 to 21+78.06	LT	460	30	15	561	0.116	1.738		15	560.9	0.116	1.738			
1 THRU 4	21+80.10 to 23+00.46	RT	460	30	15	169	0.035	0.523		15	168.7	0.035	0.523			
1 THRU 4	23+28.99 to 24+79.81	RT	460	30	15	161	0.033	0.500		15	161.3	0.033	0.500			
1 THRU 4	23+30.12 to 23+77.04	LT	460	30	15	45	0.009	0.138		15	44.5	0.009	0.138			
1 THRU 4	23+35.91 to 23+53.52	LT	460	30	15	3	0.001	0.009		15	3.0	0.001	0.009			
1 THRU 4	23+48.67 to 24+78.56	RT	460	30	15	64	0.013	0.199		15	64.3	0.013	0.199			
1 THRU 4	23+51.14 to 23+71.40	LT	460	30	15	11	0.002	0.033		15	10.6	0.002	0.033			
1 THRU 4	23+84.58 to 24+17.68	LT	460	30	15	30	0.006	0.092		15	29.6	0.006	0.092			
1 THRU 4	23+84.97 to 24+16.07	LT	460	30	15	16	0.003	0.050		15	16.1	0.003	0.050			
1 THRU 4	24+26.80 to 24+36.18	LT	460	30	15	10	0.002	0.032		15	10.3	0.002	0.032			
1 THRU 4	24+29.37 to 24+35.06	LT	460	30	15	2	0.000	0.007		15	2.3	0.000	0.007			
1 THRU 4	24+46.12 to 24+69.56	LT	460	30	15	26	0.005	0.082		15	26.4	0.005	0.082			
1 THRU 4	24+47.53 to 24+68.38	LT	460	30	15	11	0.002	0.034		15	11.0	0.002	0.034			
1 THRU 4	24+79.40 to 25+95.51	LT	460	30	15	128	0.026	0.396		15	127.8	0.026	0.396			
1 THRU 4	24+95.41 to 25+93.05	RT	460	30	15	110	0.023	0.342		15	110.3	0.023	0.342			
							SUB-TOTAL:	11.635				SUB-TOTAL:	11.635			
							TOTAL:	100.509				TOTAL:	100.509			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-3

SUMMARY OF LITTER REMOVAL AND MOWING

CONST. PHASE	LOCATION	SIDE	DURATION (DAYS)	FREQUENCY (DAYS)	LITTER REMOVAL 0107 1					MOWING 0107 2					DESIGN NOTES	CONSTRUCTION REMARKS
							AREA					AREA				
	STA. TO STA.				CYCLES	AREA (SY)	AC/ CYCLE	TOTAL (AC) P	TOTAL (AC) F	CYCLES	AREA (SY)	AC/ CYCLE	TOTAL (AC) P	TOTAL (AC) F		
1 THRU 4	24+96.29 to 25+88.55	RT	460	30	15	44	0.009	0.137		15	44.2	0.009	0.137			
1 THRU 4	26+03.48 to 26+51.49	RT	460	30	15	31	0.006	0.095		15	30.5	0.006	0.095			
1 THRU 4	26+05.99 to 26+50.88	RT	460	30	15	39	0.008	0.121		15	39.2	0.008	0.121			
1 THRU 4	26+13.89 to 28+40.84	LT	460	30	15	291	0.060	0.901		15	290.7	0.060	0.901			
1 THRU 4	26+20.05 to 28+38.34	LT	460	30	15	109	0.023	0.338		15	109.0	0.023	0.338			
1 THRU 4	26+68.09 to 27+16.05	RT	460	30	15	31	0.006	0.097		15	31.4	0.006	0.097			
1 THRU 4	26+71.45 to 27+15.50	RT	460	30	15	42	0.009	0.129		15	41.5	0.009	0.129			
1 THRU 4	27+25.17 to 27+73.84	RT	460	30	15	45	0.009	0.138		15	44.5	0.009	0.138			
1 THRU 4	27+25.45 to 27+76.72	RT	460	30	15	19	0.004	0.057		15	18.5	0.004	0.057			
1 THRU 4	27+86.17 to 28+38.78	RT	460	30	15	52	0.011	0.161		15	51.9	0.011	0.161			
1 THRU 4	27+86.42 to 28+39.13	RT	460	30	15	32	0.007	0.100		15	32.2	0.007	0.100			
1 THRU 4	28+47.87 to 29+02.54	RT	460	30	15	53	0.011	0.163		15	52.6	0.011	0.163			
1 THRU 4	28+48.17 to 29+02.55	RT	460	30	15	36	0.007	0.110		15	35.5	0.007	0.110			
1 THRU 4	28+64.44 to 29+84.23	LT	460	30	15	131	0.027	0.406		15	130.9	0.027	0.406			
1 THRU 4	28+72.59 to 29+84.23	LT	460	30	15	66	0.014	0.204		15	65.7	0.014	0.204			
1 THRU 4	29+12.41 to 29+63.73	RT	460	30	15	35	0.007	0.109		15	35.2	0.007	0.109			
1 THRU 4	29+12.48 to 29+63.75	RT	460	30	15	51	0.010	0.157		15	50.8	0.010	0.157			
1 THRU 4	29+73.54 to 30+92.50	RT	460	30	15	119	0.025	0.370		15	119.4	0.025	0.370			
1 THRU 4	29+73.56 to 29+81.58	RT	460	30	15	5	0.001	0.017		15	5.4	0.001	0.017			
1 THRU 4	29+94.17 to 30+95.26	RT	460	30	15	60	0.012	0.187		15	60.4	0.012	0.187			
1 THRU 4	29+99.69 to 30+46.97	LT	460	30	15	28	0.006	0.088		15	28.3	0.006	0.088			
1 THRU 4	29+99.95 to 30+47.21	LT	460	30	15	44	0.009	0.135		15	43.7	0.009	0.135			
1 THRU 4	30+62.91 to 30+89.00	LT	460	30	15	13	0.003	0.042		15	13.4	0.003	0.042			
1 THRU 4	30+62.94 to 30+95.19	LT	460	30	15	34	0.007	0.106		15	34.1	0.007	0.106			
1 THRU 4	31+11.19 to 31+44.39	LT	460	30	15	34	0.007	0.106		15	34.2	0.007	0.106			
1 THRU 4	31+13.02 to 32+51.83	RT	460	30	15	106	0.022	0.328		15	105.7	0.022	0.328			
1 THRU 4	31+18.91 to 32+48.57	RT	460	30	15	111	0.023	0.343		15	110.8	0.023	0.343			
1 THRU 4	31+21.73 to 31+45.43	LT	460	30	15	11	0.002	0.033		15	10.6	0.002	0.033			
1 THRU 4	31+55.18 to 32+07.85	LT	460	30	15	32	0.007	0.099		15	31.8	0.007	0.099			
1 THRU 4	31+55.26 to 32+09.51	LT	460	30	15	51	0.010	0.157		15	50.5	0.010	0.157			
1 THRU 4	32+19.19 to 32+46.78	LT	460	30	15	25	0.005	0.077		15	24.9	0.005	0.077			
1 THRU 4	32+21.14 to 32+46.12	LT	460	30	15	14	0.003	0.043		15	14.0	0.003	0.043			
1 THRU 4	32+55.52 to 33+03.20	LT	460	30	15	17	0.004	0.054		15	17.4	0.004	0.054			
1 THRU 4	32+58.48 to 33+02.00	LT	460	30	15	25	0.005	0.077		15	24.9	0.005	0.077			
1 THRU 4	32+61.69 to 32+73.84	RT	460	30	15	15	0.003	0.046		15	14.7	0.003	0.046			
1 THRU 4	32+64.65 to 32+72.24	RT	460	30	15	3	0.001	0.009		15	2.8	0.001	0.009			
1 THRU 4	32+84.68 to 33+46.06	RT	460	30	15	76	0.016	0.235		15	75.9	0.016	0.235			
1 THRU 4	32+86.25 to 33+42.89	RT	460	30	15	25	0.005	0.078		15	25.2	0.005	0.078			
1 THRU 4	33+20.14 to 33+48.85	LT	460	30	15	15	0.003	0.046		15	14.8	0.003	0.046			
1 THRU 4	33+21.22 to 33+37.49	LT	460	30	15	7	0.001	0.021		15	6.7	0.001	0.021			
1 THRU 4	33+65.70 to 34+56.06	LT	460	30	15	90	0.019	0.278		15	89.6	0.019	0.278			
1 THRU 4	33+66.98 to 34+49.62	RT	460	30	15	101	0.021	0.312		15	100.8	0.021	0.312			
1 THRU 4	33+69.02 to 34+43.79	RT	460	30	15	34	0.007	0.105		15	33.9	0.007	0.105			
1 THRU 4	33+81.17 to 34+54.57	LT	460	30	15	34	0.007	0.106		15	34.1	0.007	0.106			
1 THRU 4	34+62.01 to 35+50.05	RT	460	30	15	114	0.024	0.353		15	113.8	0.024	0.353			
1 THRU 4	34+67.54 to 35+41.37	RT	460	30	15	28	0.006	0.086		15	27.7	0.006	0.086			
1 THRU 4	34+76.06 to 35+43.35	LT	460	30	15	62	0.013	0.193		15	62.4	0.013	0.193			
							SUB-TOTAL:	7.55				SUB-TOTAL:	7.55			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-4

SUMMARY OF LITTER REMOVAL AND MOWING

CONST. PHASE	LOCATION	SIDE	DURATION (DAYS)	FREQUENCY (DAYS)	LITTER REMOVAL 0107 1					MOWING 0107 2					DESIGN NOTES	CONSTRUCTION REMARKS
	STA. TO STA.				CYCLES	AREA (SY)	AREA AC/CYCLE	AREA TOTAL (AC) P	AREA TOTAL (AC) F	CYCLES	AREA (SY)	AREA AC/CYCLE	AREA TOTAL (AC) P	AREA TOTAL (AC) F		
1 THRU 4	34+77.06 to 35+42.04	LT	460	30	15	32	0.007	0.098		15	31.5	0.007	0.098			
1 THRU 4	35+55.33 to 36+21.39	LT	460	30	15	200	0.041	0.621		15	200.4	0.041	0.621			
1 THRU 4	35+56.53 to 36+29.27	RT	460	30	15	113	0.023	0.350		15	112.9	0.023	0.350			
1 THRU 4	35+58.67 to 36+15.12	RT	460	30	15	13	0.003	0.041		15	13.3	0.003	0.041			
1 THRU 4	35+62.14 to 36+09.20	LT	460	30	15	23	0.005	0.070		15	22.6	0.005	0.070			
1 THRU 4	36+06.20 to 36+32.78	RT	460	30	15	69	0.014	0.214		15	69.0	0.014	0.214			
1 THRU 4	36+06.34 to 36+32.38	RT	460	30	15	102	0.021	0.316		15	102.0	0.021	0.316			
1 THRU 4	36+06.61 to 36+32.16	RT	460	30	15	21	0.004	0.065		15	21.1	0.004	0.065			
1 THRU 4	36+18.05 to 36+30.55	LT	460	30	15	50	0.010	0.154		15	49.6	0.010	0.154			
1 THRU 4	36+50.02 to 47+46.63	LT	460	30	15	1507	0.311	4.670		15	1506.7	0.311	4.670			
1 THRU 4	36+50.15 to 36+53.67	RT	460	30	15	4	0.001	0.013		15	4.2	0.001	0.013			
1 THRU 4	36+55.28 to 36+75.65	RT	460	30	15	176	0.036	0.544		15	175.5	0.036	0.544			
1 THRU 4	36+55.43 to 36+75.70	RT	460	30	15	10	0.002	0.031		15	10.0	0.002	0.031			
1 THRU 4	36+57.55 to 37+45.30	RT	460	30	15	71	0.015	0.220		15	70.9	0.015	0.220			
1 THRU 4	36+58.95 to 37+75.71	RT	460	30	15	137	0.028	0.423		15	136.5	0.028	0.423			
1 THRU 4	36+70.03 to 43+07.34	LT	460	30	15	380	0.079	1.179		15	380.4	0.079	1.179			
1 THRU 4	37+95.13 to 39+35.52	RT	460	30	15	83	0.017	0.257		15	83.0	0.017	0.257			
1 THRU 4	37+95.27 to 39+37.36	RT	460	30	15	140	0.029	0.433		15	139.8	0.029	0.433			
1 THRU 4	39+48.09 to 39+63.46	RT	460	30	15	5	0.001	0.015		15	4.7	0.001	0.015			
1 THRU 4	39+55.24 to 39+65.35	RT	460	30	15	12	0.002	0.036		15	11.5	0.002	0.036			
1 THRU 4	39+74.21 to 40+56.93	RT	460	30	15	97	0.020	0.300		15	96.9	0.020	0.300			
1 THRU 4	39+76.06 to 40+54.88	RT	460	30	15	27	0.006	0.084		15	27.1	0.006	0.084			
1 THRU 4	40+65.92 to 41+82.01	RT	460	30	15	130	0.027	0.403		15	130.1	0.027	0.403			
1 THRU 4	40+67.96 to 41+15.23	RT	460	30	15	18	0.004	0.055		15	17.8	0.004	0.055			
1 THRU 4	41+28.55 to 41+80.17	RT	460	30	15	27	0.005	0.082		15	26.5	0.005	0.082			
1 THRU 4	41+90.00 to 42+72.72	RT	460	30	15	85	0.017	0.262		15	84.6	0.017	0.262			
1 THRU 4	41+93.39 to 42+93.75	RT	460	30	15	61	0.013	0.188		15	60.7	0.013	0.188			
1 THRU 4	42+72.72 to 42+97.95	RT	460	30	15	9	0.002	0.028		15	8.9	0.002	0.028			
1 THRU 4	43+30.19 to 47+46.88	LT	460	30	15	294	0.061	0.911		15	294.0	0.061	0.911			
1 THRU 4	43+34.37 to 45+10.35	RT	460	30	15	188	0.039	0.584		15	188.3	0.039	0.584			
1 THRU 4	43+44.23 to 45+08.15	RT	460	30	15	69	0.014	0.213		15	68.8	0.014	0.213			
1 THRU 4	45+19.61 to 45+62.94	RT	460	30	15	45	0.009	0.138		15	44.5	0.009	0.138			
1 THRU 4	45+21.40 to 45+52.38	RT	460	30	15	11	0.002	0.035		15	11.3	0.002	0.035			
1 THRU 4	45+86.51 to 46+16.96	RT	460	30	15	29	0.006	0.091		15	29.3	0.006	0.091			
1 THRU 4	45+97.00 to 47+50.75	RT	460	30	15	134	0.028	0.416		15	134.2	0.028	0.416			
1 THRU 4	46+33.72 to 46+49.48	RT	460	30	15	8	0.002	0.025		15	8.1	0.002	0.025			
1 THRU 4	47+53.68 to 49+59.80	LT	460	30	15	162	0.033	0.501		15	161.8	0.033	0.501			
1 THRU 4	47+55.43 to 48+39.12	RT	460	30	15	48	0.010	0.148		15	47.9	0.010	0.148			
1 THRU 4	48+01.31 to 49+01.02	LT	460	30	15	23	0.005	0.072		15	23.3	0.005	0.072			
1 THRU 4	48+49.48 to 49+59.81	RT	460	30	15	42	0.009	0.131		15	42.2	0.009	0.131			
1 THRU 4	49+64.36 to 49+80.64	LT	460	30	15	19	0.004	0.060		15	19.2	0.004	0.060			
1 THRU 4	49+64.37 to 49+66.52	LT	460	30	15	2	0.000	0.005		15	1.7	0.000	0.005			
1 THRU 4	50+20.72 to 50+43.75	LT	460	30	15	22	0.005	0.068		15	21.9	0.005	0.068			
1 THRU 4	50+31.79 to 51+69.64	RT	460	30	15	124	0.026	0.386		15	124.4	0.026	0.386			
1 THRU 4	50+39.68 to 50+39.68	LT	460	30	15	13	0.003	0.041		15	13.3	0.003	0.041			
1 THRU 4	50+43.74 to 55+10.93	LT	460	30	15	222	0.046	0.689		15	222.2	0.046	0.689			
1 THRU 4	50+44.38 to 55+10.48	LT	460	30	15	1079	0.223	3.344		15	1078.9	0.223	3.344			
						SUB-TOTAL:		19.01				SUB-TOTAL:		19.01		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-5

SUMMARY OF LITTER REMOVAL AND MOWING

CONST. PHASE	LOCATION	SIDE	DURATION (DAYS)	FREQUENCY (DAYS)	LITTER REMOVAL 0107 1					MOWING 0107 2					DESIGN NOTES	CONSTRUCTION REMARKS
							AREA					AREA				
	STA. TO STA.				CYCLES	AREA (SY)	AC/ CYCLE	TOTAL (AC) P	TOTAL (AC) F	CYCLES	AREA (SY)	AC/ CYCLE	TOTAL (AC) P	TOTAL (AC) F		
1 THRU 4	51+77.76 to 53+17.48	RT	460	30	15	227	0.047	0.703		15	226.9	0.047	0.703			
1 THRU 4	53+33.46 to 53+64.85	RT	460	30	15	40	0.008	0.122		15	39.5	0.008	0.122			
1 THRU 4	53+82.39 to 53+94.74	RT	460	30	15	6	0.001	0.020		15	6.4	0.001	0.020			
1 THRU 4	53+82.48 to 54+24.16	RT	460	30	15	53	0.011	0.164		15	52.9	0.011	0.164			
1 THRU 4	54+39.21 to 54+73.77	RT	460	30	15	69	0.014	0.214		15	68.9	0.014	0.214			
1 THRU 4	54+83.62 to 55+35.58	RT	460	30	15	97	0.020	0.301		15	97.0	0.020	0.301			
1 THRU 4	55+37.02 to 59+06.84	LT	460	30	15	450	0.093	1.395		15	450.2	0.093	1.395			
1 THRU 4	55+37.40 to 59+03.35	LT	460	30	15	846	0.175	2.623		15	846.4	0.175	2.623			
1 THRU 4	55+50.99 to 56+64.58	RT	460	30	15	227	0.047	0.704		15	227.1	0.047	0.704			
1 THRU 4	56+88.54 to 58+13.67	RT	460	30	15	248	0.051	0.769		15	248.1	0.051	0.769			
1 THRU 4	58+23.63 to 58+40.78	RT	460	30	15	32	0.007	0.098		15	31.5	0.007	0.098			
1 THRU 4	58+50.62 to 58+54.76	RT	460	30	15	7	0.001	0.021		15	6.9	0.001	0.021			
1 THRU 4	59+35.22 to 59+51.79	LT	460	30	15	23	0.005	0.071		15	22.9	0.005	0.071			
1 THRU 4	59+62.83 to 60+01.08	RT	460	30	15	71	0.015	0.219		15	70.8	0.015	0.219			
1 THRU 4	59+76.76 to 63+21.41	LT	460	30	15	440	0.091	1.364		15	440.2	0.091	1.364			
1 THRU 4	59+77.33 to 63+22.14	LT	460	30	15	783	0.162	2.427		15	783.1	0.162	2.427			
1 THRU 4	60+24.54 to 62+36.16	RT	460	30	15	438	0.090	1.357		15	437.7	0.090	1.357			
1 THRU 4	62+63.16 to 62+95.79	RT	460	30	15	58	0.012	0.181		15	58.3	0.012	0.181			
1 THRU 4	63+44.51 to 66+13.53	RT	460	30	15	882	0.182	2.733		15	881.8	0.182	2.733			
1 THRU 4	63+60.68 to 66+62.54	LT	460	30	15	332	0.069	1.030		15	332.4	0.069	1.030			
1 THRU 4	63+61.92 to 75+84.84	LT	460	30	15	3081	0.637	9.550		15	3081.4	0.637	9.550			
1 THRU 4	66+67.18 to 76+33.51	LT	460	30	15	1247	0.258	3.863		15	1246.5	0.258	3.863			
1 THRU 4	67+60.23 to 67+60.23	RT	460	30	15	788	0.163	2.442		15	788.1	0.163	2.442			
1 THRU 4	69+05.96 to 69+65.93	RT	460	30	15	165	0.034	0.512		15	165.2	0.034	0.512			
1 THRU 4	69+90.12 to 72+47.71	RT	460	30	15	1026	0.212	3.179		15	1025.9	0.212	3.179			
1 THRU 4	72+73.60 to 73+45.57	RT	460	30	15	234	0.048	0.726		15	234.1	0.048	0.726			
1 THRU 4	73+71.15 to 75+11.31	RT	460	30	15	543	0.112	1.683		15	543.1	0.112	1.683			
1 THRU 4	75+21.32 to 82+49.60	RT	460	30	15	2929	0.605	9.076		15	2928.5	0.605	9.076			
1 THRU 4	76+62.61 to 79+43.09	LT	460	30	15	342	0.071	1.061		15	342.2	0.071	1.061			
1 THRU 4	76+71.96 to 79+47.79	LT	460	30	15	658	0.136	2.039		15	657.9	0.136	2.039			
1 THRU 4	79+95.19 to 80+89.41	LT	460	30	15	215	0.044	0.665		15	214.5	0.044	0.665			
1 THRU 4	80+00.59 to 80+92.30	LT	460	30	15	107	0.022	0.332		15	107.0	0.022	0.332			
1 THRU 4	81+08.25 to 83+81.54	LT	460	30	15	753	0.155	2.332		15	752.6	0.155	2.332			
1 THRU 4	81+09.95 to 83+81.56	LT	460	30	15	249	0.051	0.771		15	248.8	0.051	0.771			
1 THRU 4	82+67.62 to 83+81.62	RT	460	30	15	349	0.072	1.083		15	349.4	0.072	1.083			
1 THRU 4	83+86.36 to 85+12.09	LT	460	30	15	219	0.045	0.680		15	219.3	0.045	0.680			
1 THRU 4	83+86.42 to 85+06.65	LT	460	30	15	104	0.021	0.322		15	104.0	0.021	0.322			
1 THRU 4	84+32.38 to 88+47.85	RT	460	30	15	781	0.161	2.421		15	781.2	0.161	2.421			
1 THRU 4	85+46.26 to 87+96.64	LT	460	30	15	217	0.045	0.671		15	216.5	0.045	0.671			
1 THRU 4	85+54.95 to 88+48.01	LT	460	30	15	685	0.142	2.124		15	685.4	0.142	2.124			
1 THRU 4	88+47.75 to 88+74.66	RT	460	30	15	86	0.018	0.268		15	86.4	0.018	0.268			
							SUB-TOTAL:	62.32				SUB-TOTAL:	62.32			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-6

SUMMARY OF CLEARING AND GRUBBING & REMOVAL ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	UNITS	QUANTITY P	QUANTITY F	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0110 1 1	CLEARAING & GRUBBING	12+56.60 to 12+70.74	LT	SY	0.001		3.178			
		12+84.52 to 13+06.24	RT		0.001					
		13+01.16 to 13+49.76	LT		0.008					
		13+06.11 to 13+17.80	RT		0.000					
		13+95.18 to 14+55.34	LT		0.015					
		15+00.52 to 15+25.79	LT		0.003					
		15+16.36 to 15+37.71	RT		0.002					
		15+24.35 to 15+30.70	RT		0.001					
		15+50.92 to 17+72.48	LT		0.058					
		15+87.64 to 16+30.12	RT		0.004					
		16+16.29 to 16+21.85	RT		0.001					
		16+71.73 to 17+13.96	RT		0.004					
		17+65.21 to 17+70.85	LT		0.001					
		17+65.32 to 17+75.48	RT		0.001					
		17+68.47 to 17+72.81	RT		0.001					
		17+95.46 to 20+26.76	LT		0.086					
		20+34.57 to 20+58.54	RT		0.004					
		20+42.71 to 23+09.58	LT		0.108					
		22+02.36 to 22+26.35	RT		0.005					
		22+60.07 to 22+65.05	RT		0.002					
		22+73.52 to 23+06.98	RT		0.002					
		23+27.78 to 23+65.76	RT		0.008					
		23+30.68 to 23+73.13	LT		0.003					
		23+39.88 to 23+55.02	LT		0.004					
		23+47.54 to 30+97.26	RT		0.102					
		24+80.87 to 25+80.47	LT		0.011					
		31+11.23 to 31+66.00	RT		0.007					
		31+39.47 to 31+45.43	LT		0.000					
		31+55.26 to 31+61.34	LT		0.000					
		31+76.19 to 31+81.40	LT		0.001					
		31+76.40 to 31+82.47	RT		0.001					
		32+02.47 to 32+07.58	LT		0.000					
		32+21.86 to 32+26.46	LT		0.000					
		34+97.96 to 37+65.29	LT/RT		0.362					
		34+98.21 to 35+47.80	RT		0.004					
		35+10.36 to 36+21.31	LT		0.034					
		36+55.39 to 37+07.72	RT		0.021					
		42+74.04 to 42+81.36	RT		0.001					
		43+01.92 to 43+35.04	LT		0.002					
		43+02.32 to 43+34.83	LT		0.006					
		46+30.90 to 48+39.12	RT		0.040					
		47+33.69 to 47+69.79	LT		0.004					
		49+46.80 to 49+58.60	RT		0.001					
		49+63.05 to 49+63.05	RT		0.003					
		50+22.01 to 55+06.99	LT		0.274					
		50+28.82 to 51+67.85	RT		0.022					
		51+76.23 to 53+15.28	RT		0.016					
		53+35.47 to 53+51.04	RT		0.002					
		54+04.49 to 54+23.95	RT		0.002					
		54+37.39 to 54+74.08	RT		0.004					
		54+85.87 to 56+63.97	RT		0.025					

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-7

SUMMARY OF CLEARING AND GRUBBING & REMOVAL ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	UNITS	QUANTITY P	QUANTITY F	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0110 1 1	CLEARAING & GRUBBING (CONT'D)	55+39.38 to 59+04.94	LT		0.1946					
		55+53.18 to 56+58.87	RT		0.0139					
		56+88.54 to 63+00.80	RT		0.0735					
		56+95.09 to 58+10.06	RT		0.0149					
		59+77.16 to 63+22.08	LT		0.1957					
		63+21.33 to 63+62.13	LT		0.0093					
		63+66.06 to 76+18.75	LT		0.1710					
		63+67.00 to 64+44.48	LT		0.0092					
		63+72.23 to 66+05.13	RT		0.0105					
		64+44.47 to 65+24.48	LT		0.0059					
		64+44.85 to 65+23.77	LT		0.0037					
		65+24.47 to 70+14.06	LT		0.0562					
		66+46.77 to 68+70.04	RT		0.0110					
		69+05.96 to 69+65.86	RT		0.0037					
		69+39.73 to 69+65.35	RT		0.0014					
		69+90.12 to 70+24.23	RT		0.0025					
		69+95.58 to 72+47.63	RT		0.0289					
		70+05.08 to 72+30.92	RT		0.0288					
		70+14.04 to 71+12.97	LT		0.0196					
		70+14.08 to 71+13.02	LT		0.0076					
		71+12.92 to 76+24.05	LT		0.0571					
		72+73.61 to 73+45.55	RT		0.0082					
		72+94.48 to 73+32.81	RT		0.0029					
		73+71.15 to 75+08.69	RT		0.0159					
		73+88.81 to 75+01.41	RT		0.0139					
		75+23.16 to 82+46.63	RT		0.4431					
		75+83.06 to 76+24.09	LT		0.0012					
		76+23.98 to 76+74.62	LT		0.0107					
		76+78.78 to 79+42.75	LT		0.0321					
		76+80.71 to 79+19.61	LT		0.0323					
		79+48.26 to 79+95.13	LT		0.0106					
		80+00.62 to 80+82.99	LT		0.0094					
		80+12.29 to 80+77.96	LT		0.0082					
		81+17.06 to 82+05.77	LT		0.0116					
		81+95.35 to 82+16.79	LT		0.0018					
		82+16.78 to 83+79.16	LT		0.0186					
		82+70.87 to 83+81.76	RT		0.0283					
		82+83.20 to 83+81.60	RT		0.0071					
		83+81.58 to 83+86.81	LT/RT		0.0087					
		83+86.71 to 85+05.38	LT		0.0240					
		83+86.74 to 84+36.87	LT		0.0076					
		84+09.84 to 85+13.46	LT		0.0142					
		84+29.35 to 85+12.32	LT		0.0097					
		84+31.95 to 88+71.82	RT		0.1485					
		84+87.53 to 85+71.11	LT		0.0348					
		85+46.26 to 87+99.33	LT		0.0312					
		85+46.77 to 88+44.73	LT		0.0406					
		85+52.89 to 86+64.86	LT		0.0142					

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-8

SUMMARY OF CLEARING AND GRUBBING & REMOVAL ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	UNITS	QUANTITY P	QUANTITY F	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0110 4 10	EXIST. CONC. REMOVAL	11+70.67 to 13+21.24	RT	SY	170		2987			
		11+72.46 to 12+33.72	LT		91					
		12+33.13 to 12+38.18	LT		3					
		12+50.96 to 12+74.71	LT		13					
		12+63.63 to 12+73.16	LT		2					
		13+32.74 to 13+61.91	RT		28					
		13+45.10 to 13+96.04	LT		63					
		14+54.66 to 15+22.64	LT		83					
		15+14.42 to 15+39.27	RT		13					
		15+90.36 to 16+31.33	RT		23					
		16+82.64 to 17+04.53	RT		11					
		17+62.27 to 17+73.17	RT		5					
		17+84.21 to 17+89.25	RT		2					
		20+65.87 to 20+95.91	RT		16					
		21+10.10 to 21+70.05	RT		33					
		22+08.36 to 22+20.36	RT		7					
		22+60.07 to 22+65.07	RT		3					
		23+31.31 to 23+72.40	LT		21					
		23+43.55 to 23+65.76	RT		11					
		23+53.64 to 24+76.64	RT		11					
		24+00.00 to 24+30.00	RT		16					
		24+76.44 to 25+17.43	RT		29					
		25+17.43 to 25+85.69	RT		3					
		25+42.25 to 25+68.26	LT		14					
		25+83.46 to 26+77.51	RT		83					
		27+10.46 to 27+91.42	RT		45					
		27+12.49 to 27+27.50	RT		12					
		27+37.20 to 27+87.94	RT		21					
		28+35.77 to 28+50.84	RT		12					
		28+97.12 to 29+12.71	RT		14					
		29+22.67 to 29+47.77	RT		14					
		29+60.56 to 29+75.29	RT		13					
		30+29.68 to 30+59.71	RT		16					
		30+76.68 to 30+94.74	RT		9					
		31+16.01 to 31+31.69	RT		8					
		31+35.24 to 31+65.22	LT		23					
		31+76.40 to 31+81.40	RT		3					
		31+76.40 to 31+81.40	LT		3					
		32+06.19 to 32+23.58	LT		18					
		33+32.88 to 33+45.83	RT		6					
		34+49.86 to 34+82.58	LT		31					
		34+95.18 to 36+21.01	RT		85					
		36+10.71 to 36+30.98	RT		39					
		36+19.85 to 36+32.78	RT		18					
		36+60.91 to 37+34.45	LT		41					
		43+01.92 to 43+12.77	LT		5					
		43+26.42 to 43+35.17	LT		4					
		46+53.69 to 46+86.24	RT		15					
		46+73.70 to 46+84.05	LT		5					
		47+11.61 to 47+97.70	LT		49					

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-9

SUMMARY OF CLEARING AND GRUBBING & REMOVAL ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	UNITS	QUANTITY P	QUANTITY F	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0110 4 10	EXIST. CONC. REMOVAL (CONT'D)	47+35.29 to 48+39.18	RT	SY	42					
		48+06.36 to 48+41.56	LT		19					
		48+33.46 to 48+55.56	RT		19					
		48+49.46 to 48+61.76	RT		6					
		49+47.07 to 49+74.68	RT		20					
		50+21.51 to 55+10.93	LT		283					
		50+22.65 to 50+53.26	RT		17					
		51+55.24 to 51+78.81	RT		16					
		53+11.93 to 53+38.11	RT		41					
		55+37.40 to 59+05.39	LT		208					
		58+09.50 to 58+26.65	RT		32					
		58+41.06 to 58+50.92	RT		19					
		58+52.86 to 59+65.13	RT		219					
		59+77.33 to 63+21.12	LT		183					
		62+95.62 to 63+00.80	RT		8					
		63+44.48 to 63+53.61	RT		5					
		63+61.99 to 63+67.00	LT		3					
		63+70.96 to 64+05.08	RT		19					
		64+44.48 to 65+24.49	LT		43					
		65+00.00 to 65+10.01	RT		5					
		69+05.96 to 69+35.91	RT		25					
		69+40.41 to 69+65.75	RT		14					
		69+90.60 to 69+95.94	RT		3					
		70+14.06 to 71+13.34	LT		57					
		74+92.80 to 75+38.54	RT		54					
		75+80.79 to 76+25.48	LT		25					
		76+69.60 to 76+78.78	LT		5					
		79+42.77 to 79+48.64	LT		4					
		79+95.02 to 80+00.63	LT		4					
		80+82.91 to 81+17.08	LT		31					
		81+56.29 to 82+16.80	LT		36					
		82+26.57 to 82+84.59	RT		144					
		83+79.17 to 84+37.14	LT		33					
		83+86.69 to 84+44.02	RT		75					
		84+67.70 to 84+77.94	LT		5					
		85+06.01 to 85+09.48	LT		1					
		85+51.71 to 85+64.28	LT		6					

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-10

SUMMARY OF MAILBOXES

STATION	SIDE	QUANTITY 0110 7 1 P	QUANTITY 0110 7 1 F	DESIGN NOTES	CONSTRUCTION REMARKS
13+73.67	LT	1			
20+64.92	RT	1			
24+01.99	LT	1			
24+58.86	LT	1			
36+22.53	RT	1			
36+55.91	RT	1			
51+84.93	RT	1			
53+09.75	RT	1			
58+07.93	RT	1			
59+13.46	RT	1			
59+67.31	RT	1			
SUB-TOTAL:		11			
TOTAL:		11			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-11

SUMMARY OF PAVEMENT

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	UNIT	QUANTITY P	QUANTITY F	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0160 4	TYPE B STABILIZATION	16+71.99 to 17+13.96	RT	SY	20.1		5078			
		17+95.46 to 18+20.59	LT		7.3					
		20+44.53 to 20+70.03	LT		11.6					
		24+80.87 to 25+80.78	LT		53.8					
		30+70.28 to 30+97.28	RT		9.2					
		31+11.23 to 31+38.71	RT		11.4					
		35+15.13 to 37+65.32	LT/RT		1725.7					
		51+76.70 to 55+07.06	LT		216.9					
		55+40.22 to 58+98.36	LT		235.7					
		55+51.46 to 56+58.87	RT		67.5					
		56+95.09 to 58+13.58	RT		73.5					
		59+79.94 to 62+90.37	LT		204.1					
		62+95.37 to 63+17.48	LT		11.5					
		63+66.06 to 76+18.75	LT		828.4					
		69+42.21 to 70+15.12	RT		116.8					
		69+98.99 to 72+30.92	RT		145.3					
		72+94.48 to 73+32.81	RT		14.1					
		73+88.81 to 75+01.41	RT		67.6					
		75+29.43 to 82+46.65	RT		470.1					
		76+79.67 to 79+19.61	LT		156.1					
		80+12.29 to 80+77.96	LT		39.6					
		82+72.60 to 83+96.10	RT		78.4					
		84+10.42 to 85+11.68	LT		70.4					
		84+22.06 to 87+93.63	RT		246.0					
		85+46.77 to 88+44.71	LT		196.4					
285709	OPTIONAL BASE, BASE GROUP 09	16+71.99 to 17+13.96	RT	SY	20.1		1662			
		17+95.46 to 18+20.59	LT		7.3					
		20+44.53 to 20+70.03	LT		11.6					
		24+80.87 to 25+80.78	LT		53.8					
		30+70.28 to 30+97.28	RT		9.2					
		31+11.23 to 31+38.71	RT		11.4					
		36+40.22 to 36+40.22	RT		1431.4					
		69+42.21 to 70+15.12	RT		116.8					
0327 70 6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	11+24.55 to 35+15.20	LT/RT	SY	6806.6		22301			
		37+65.19 to 83+76.58	LT/RT		14251.2					
		83+91.43 to 88+44.73	LT/RT		1243.1					
0327 70 10	MILLING EXIST ASPH PAVT, 5" AVG DEPTH	83+76.56 to 83+91.47	LT/RT	SY	37.9		38			
0334 1 53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG 76-22	16+71.99 to 17+13.96	RT	TN	1.66		144.2			
		17+95.46 to 18+20.59	LT		0.60					
		20+44.54 to 20+70.03	LT		0.95					
		24+80.87 to 25+80.78	LT		4.37					
		30+70.30 to 30+97.26	RT		0.77					
		31+11.23 to 31+38.71	RT		0.94					
		36+40.22 to 36+40.22	RT		118.09					
		69+42.21 to 70+15.12	RT		9.64					
		83+76.56 to 83+91.88	LT/RT		7.14					
0337 7 83	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22	11+24.55 to 35+15.20	LT/RT	TN	561.55		1980.6			
		16+71.99 to 17+13.96	RT		1.66					
		17+95.46 to 18+20.59	LT		0.60					
		20+44.54 to 20+70.03	LT		0.95					

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-12

SUMMARY OF PAVEMENT

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	UNIT	QUANTITY P	QUANTITY F	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0337 7 83	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22 (CONT'D)	24+80.87 to 25+80.78	LT	TN	4.37					
		30+70.30 to 30+97.26	RT		0.77					
		31+11.23 to 31+38.71	RT		0.94					
		36+40.22 to 36+40.22	RT		118.09					
		37+65.19 to 83+76.58	LT/RT		1176.37					
		69+42.21 to 70+15.12	RT		9.64					
		83+76.56 to 83+91.88	LT/RT		3.06					
		83+91.43 to 88+44.73	LT/RT		102.56					
0350 3 7	PLAIN CEMENT CONCRETE PAVEMENT, 9"	36+40.29 to 36+40.29	RT	SY	110.0		110			
0523 1	PATTERNED PAVEMENT , VEHICULAR AREAS	36+34.68 to 36+42.06	RT	SY	20.1		136			
		36+37.41 to 36+41.21	RT		5.8					
		36+40.29 to 36+40.29	RT		110.0					

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-13

SUMMARY OF MISCELLANEOUS DRAINAGE ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	UNIT	QUANTITY P	QUANTITY F	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0120 1	REGULAR EXCAVATION									
	SPECIAL DITCH	103+25.55 TO 104+40.75	LT	SY	55.0		55		B/L LINEBAUGH	
0430 984 129	S-17, 24" 1:4, MES SIDEDRAIN	104+50.47	LT	EA	1		1		B/L LINEBAUGH	
0570 1 2	SOD	104+50.47	LT	SY	4.0		4		B/L LINEBAUGH, S-17	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

THOMAS J. WARD, P.E.
P.E. LICENSE NUMBER 52144
BES, INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
CERTIFICATE OF AUTHORIZATION 9835

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001221	HILLSBOROUGH	436639-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-14

SUMMARY OF UTILITY ADJUSTMENTS

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STATION	SIDE	UNIT	QUANTITY P	QUANTITY F	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0425 5 1	MANHOLE, ADJUST, UTILITIES	13+05.01	RT	EA	1		15			
		17+70.69	RT		1					
		36+40.35	RT		1					
		56+82.23	LT		1					
		58+42.72	LT		1					
		59+14.02	RT		1					
		59+98.90	LT		1					
		63+18.54	LT		1					
		66+61.46	LT		1					
		70+04.97	LT		1					
		75+94.23	RT		1					
		75+94.49	LT		1					
		76+02.29	LT		1					
		80+15.11	LT		1					
		84+40.44	LT		1					
0425 6	VALVE BOX, ADJUST	13+08.68	RT	EA	1		49			
		13+09.03	RT		1					
		13+11.37	RT		1					
		27+31.30	RT		1					
		27+44.33	RT		1					
		36+03.99	LT		1					
		36+14.33	RT		1					
		36+25.42	RT		1					
		36+25.63	RT		1					
		36+25.87	RT		1					
		36+53.28	LT		1					
		36+64.31	RT		1					
		48+37.28	RT		1					
		50+29.96	LT		1					
		50+32.14	LT		1					
		50+74.15	RT		1					
		50+78.27	RT		1					
		50+82.37	RT		1					
		52+84.63	RT		1					
		54+87.57	RT		1					
		55+30.05	RT		1					
		55+80.89	LT		1					
		56+61.98	LT		1					
		57+58.62	LT		1					
		57+74.74	LT		1					
		58+79.81	LT		1					
		58+97.66	RT		1					
		58+98.94	RT		1					
		59+22.01	RT		1					
		59+23.19	RT		1					
		59+72.27	RT		1					
		59+93.78	LT		1					
		59+94.24	LT		1					
		61+88.90	RT		1					
		62+23.03	RT		1					
		62+23.68	RT		1					
		62+88.82	LT		1					
		62+96.95	LT		1					
		62+99.29	LT		1					
		66+98.89	LT		1					
		69+44.07	RT		1					
		71+42.98	RT		1					
		73+16.72	LT		1					
		76+15.84	LT		1					
		76+17.71	LT		1					
		76+86.08	LT		1					
		79+98.43	LT		1					
		80+21.86	LT		1					
		82+27.99	RT		1					

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-15

SUMMARY OF RAILING

LOCATION	SIDE	PIPE HANDRAIL - GUIDERAIL (ALUMINUM)		DESIGN NOTES	CONSTRUCTION REMARKS
		0515 1 2			
STA. TO STA.		LF			
		P	F		
47+42.86 to 47+77.86	RT	35.0			
SUB-TOTAL:		35.0			
TOTAL:		35			

SUMMARY OF CURB & GUTTER AND/OR TRAFFIC SEPARATORS

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	QUANTITY			TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
		STA. TO STA.			GROSS LENGTH	NET LENGTH					
						P	F	P	F		
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	11+70.82 to 13+20.58	RT	LF	149.9	149.9		2210			
		11+72.48 to 12+33.71	LT		61.2	61.2					
		12+63.77 to 12+71.97	LT		10.2	10.2					
		13+03.55 to 15+23.50	LT		229.9	229.9					
		23+47.41 to 30+93.78	RT		760.9	760.9					
		31+14.73 to 31+66.00	RT		66.2	66.2					
		35+64.87 to 35+82.69	LT		17.9	17.9					
		35+64.97 to 35+78.96	RT		14.0	14.0					
		35+88.74 to 36+26.60	LT		80.6	80.6					
		35+88.86 to 36+26.30	RT		104.0	104.0					
		36+53.71 to 36+53.71	RT		15.9	15.9					
		36+53.71 to 37+15.54	RT		95.6	95.6					
		36+55.13 to 37+15.47	LT		104.6	104.6					
		46+30.90 to 47+46.94	RT		225.7	225.7					
		47+61.56 to 48+55.44	RT		165.4	165.4					
		49+55.58 to 49+73.02	RT		21.6	21.6					
		49+69.82 to 49+74.50	LT		7.3	7.3					
		50+22.91 to 50+53.68	LT		41.0	41.0					
		50+24.02 to 50+53.26	RT		38.2	38.2					
0520 2 4	CONCRETE CURB, TYPE D	35+15.20 to 35+64.87	LT	LF	49.8	49.8		380			
		35+15.20 to 35+64.97	RT		50.0	50.0					
		36+26.30 to 36+29.91	RT		30.1	30.1					
		36+26.54 to 36+30.81	LT		50.0	50.0					
		36+49.90 to 36+53.71	RT		49.9	49.9					
		36+50.02 to 36+55.13	LT		50.0	50.0					
		37+15.47 to 37+65.24	LT		49.8	49.8					
		37+15.54 to 37+65.24	RT		49.9	49.9					
0520 2 8	CONCRETE CURB, TYPE RA	36+21.72 to 36+58.72	LT/RT	LF	116.2	116.2		116			
0520 70	CONCRETE TRAFFIC SEPARATOR, SPECIAL - VARIABLE WIDTH	35+61.53 to 35+68.26	LT/RT	SY	2.8	2.8		51			
		35+78.26 to 36+03.77	LT/RT		14.6	14.6					
		36+38.29 to 36+45.02	LT		11.1	11.1					
		36+39.04 to 36+43.23	LT		5.8	5.8					
		36+76.68 to 36+95.22	LT/RT		11.1	11.1					
		37+05.22 to 37+18.91	LT/RT		5.8	5.8					

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-16

SUMMARY OF SIDEWALK & DETECTABLE WARNINGS

LOCATION STA. TO STA.	SIDE	CONC SIDEWALK 4" 0522 1 SY P	CONC SIDEWALK 4" 0522 1 SY F	CONC SIDEWALK 6" 0522 2 SY P	CONC SIDEWALK 6" 0522 2 SY F	DETECTABLE WARNINGS 0527 2 SF P	DETECTABLE WARNINGS 0527 2 SF F	DIRECTIONAL INDICATOR 0528-1 SF P	DIRECTIONAL INDICATOR 0528-1 SF F	DESIGN NOTES	CONSTRUCTION REMARKS
11+75.91 to 11+80.91	RT	2.6									
11+77.42 to 11+85.17	LT	4.3									
12+16.70 to 13+20.91	RT	57.3									
12+21.17 to 12+24.97	LT	2.1									
12+33.13 to 12+38.18	LT	2.8									
12+50.96 to 12+62.20	LT	5.7									
13+17.27 to 13+54.56	LT	23.9									
13+35.47 to 13+59.75	RT	13.4									
13+90.56 to 14+53.26	LT	40.2									
15+14.42 to 15+39.27	RT	12.7									
15+50.92 to 17+72.68	LT	121.6									
15+90.36 to 15+93.80	RT	1.9									
16+03.80 to 16+30.89	RT	15.0									
16+82.64 to 16+99.24	RT	7.5									
17+62.27 to 17+73.17	RT	4.8									
17+84.21 to 17+89.25	RT	2.1									
17+98.36 to 20+26.88	LT	126.1									
20+47.37 to 23+09.58	LT	152.4									
20+65.87 to 20+95.91	RT	16.5									
21+10.10 to 21+70.05	RT	32.5									
22+60.07 to 22+65.07	RT	10.2									
23+28.07 to 23+65.76	RT	22.0									
23+30.71 to 23+72.40	LT	24.1									
24+00.00 to 24+30.00	RT	16.4									
25+42.25 to 25+68.26	LT	14.3									
25+83.45 to 25+88.56	RT	2.8									
26+03.48 to 26+51.50	RT	26.7									
26+71.52 to 26+74.40	RT	1.6									
27+10.46 to 27+15.51	RT	2.8									
27+25.18 to 27+74.86	RT	27.6									
27+86.85 to 27+91.42	RT	2.5									
29+22.67 to 29+47.77	RT	13.4									
30+29.68 to 30+59.71	RT	15.7									
31+35.48 to 31+45.43	LT	5.5									
31+55.26 to 31+65.26	LT	5.4									
31+76.40 to 31+81.40	RT	8.7									
31+76.40 to 31+81.40	LT	6.0									
33+32.88 to 33+45.83	RT	6.2									
34+50.63 to 34+55.71	LT	2.8									
34+76.12 to 34+81.09	LT	2.7									
34+95.18 to 36+15.75	RT	72.1									
35+10.05 to 35+43.31	LT	18.3									
35+22.91 to 35+36.77	RT	5.0									
35+24.49 to 35+37.39	LT	4.4									
35+55.39 to 36+26.28	LT	88.0									
35+69.36 to 35+77.36	LT	3.5									
35+70.21 to 35+77.11	RT	3.3									
SUB-TOTAL:		1057.4									
TOTAL:		1439		6311		632		96			

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-17

SUMMARY OF SIDEWALK & DETECTABLE WARNINGS

LOCATION STA. TO STA.	SIDE	CONC SIDEWALK 4" 0522 1 SY P	CONC SIDEWALK 4" 0522 1 SY F	CONC SIDEWALK 6" 0522 2 SY P	CONC SIDEWALK 6" 0522 2 SY F	DETECTABLE WARNINGS 0527 2 SF P	DETECTABLE WARNINGS 0527 2 SF F	DIRECTIONAL INDICATOR 0528-1 SF P	DIRECTIONAL INDICATOR 0528-1 SF F	DESIGN NOTES	CONSTRUCTION REMARKS
36+12.94 to 36+18.93	RT	11.8									
36+15.06 to 36+20.93	RT	5.7									
36+18.02 to 36+24.43	RT	3.3									
36+20.04 to 36+27.58	LT	4.9									
36+20.07 to 36+26.09	LT	3.6									
36+20.25 to 36+28.06	RT	4.7									
36+52.35 to 36+65.21	RT	43.7									
36+52.77 to 36+60.21	RT	5.1									
36+54.21 to 36+60.21	RT	3.6									
36+54.25 to 36+61.92	LT	4.5									
36+56.40 to 36+62.87	LT	3.7									
36+61.15 to 37+34.45	LT	60.6									
36+61.21 to 37+20.07	RT	37.6									
36+96.22 to 37+04.22	LT	3.6									
36+96.28 to 37+04.26	RT	3.6									
37+13.39 to 37+27.69	LT	5.1									
37+13.65 to 37+27.70	RT	5.3									
43+02.29 to 43+35.17	LT	18.3									
46+53.69 to 46+86.36	RT	16.5									
46+73.70 to 46+84.06	LT	5.4									
47+11.61 to 47+97.64	LT	47.3									
47+35.29 to 48+39.46	RT	57.9									
48+06.36 to 48+41.56	LT	18.7									
48+49.45 to 48+61.76	RT	6.8									
11+70.82 to 12+26.48	RT			50.9							
11+72.46 to 12+33.72	LT			76.6							
12+59.64 to 12+71.97	LT			5.5							
13+02.54 to 13+20.60	RT			11.4							
13+02.58 to 13+17.50	LT			6.5							
13+44.56 to 14+00.56	LT			60.2							
14+43.26 to 14+99.26	LT			59.7							
14+89.26 to 15+16.78	LT			13.8							
15+87.65 to 16+09.79	RT			15.8							
20+34.65 to 20+58.64	RT			21.5							
22+02.36 to 22+26.35	RT			29.0							
24+72.55 to 25+17.43	RT			39.6							
25+82.55 to 26+09.47	RT			20.9							
26+45.49 to 26+77.51	RT			36.1							
27+09.49 to 27+31.17	RT			22.7							
27+68.84 to 27+92.84	RT			27.5							
28+32.77 to 28+53.98	RT			17.9							
28+96.53 to 29+18.47	RT			18.4							
29+57.74 to 29+79.53	RT			17.9							
30+76.67 to 30+91.29	RT			7.4							
31+16.61 to 31+31.69	RT			7.5							
31+39.43 to 31+61.34	LT			16.0							
32+02.51 to 32+26.46	LT			18.7							
34+49.74 to 34+82.11	LT			25.6							
SUB-TOTAL:		381.3		627.1							

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-18

SUMMARY OF SIDEWALK & DETECTABLE WARNINGS

LOCATION STA. TO STA.	SIDE	CONC SIDEWALK 4" 0522 1 SY P	CONC SIDEWALK 4" 0522 1 SY F	CONC SIDEWALK 6" 0522 2 SY P	CONC SIDEWALK 6" 0522 2 SY F	DETECTABLE WARNINGS 0527 2 SF P	DETECTABLE WARNINGS 0527 2 SF F	DIRECTIONAL INDICATOR 0528-1 SF P	DIRECTIONAL INDICATOR 0528-1 SF F	DESIGN NOTES	CONSTRUCTION REMARKS
35+38.67 to 35+61.50	RT			16.3							
35+39.66 to 35+60.10	LT			17.1							
36+10.71 to 36+23.19	RT			21.7							
36+14.61 to 36+25.79	RT			13.3							
36+23.32 to 36+32.18	RT			14.9							
36+54.21 to 36+66.07	RT			23.2							
48+33.46 to 48+55.56	RT			17.2							
49+47.08 to 49+72.63	RT			16.1							
49+64.36 to 49+74.09	LT			3.2							
50+21.51 to 87+99.33	LT			3391.2							
50+22.65 to 53+51.04	RT			230.2							
54+04.49 to 54+23.95	RT			10.3							
54+37.39 to 54+74.08	RT			19.5							
54+85.87 to 56+63.97	RT			122.2							
56+88.47 to 63+00.74	RT			497.8							
63+44.36 to 63+53.61	RT			4.5							
63+70.55 to 64+05.09	RT			18.7							
65+00.00 to 65+10.01	RT			5.4							
69+05.55 to 72+47.63	RT			189.9							
72+73.61 to 73+45.55	RT			39.8							
73+71.15 to 88+71.82	RT			1011.3							
12+64.82 to 12+70.61	LT					10.9					
13+03.89 to 13+10.99	LT					13.2					
13+09.61 to 13+13.68	RT					8.0					
15+08.58 to 15+15.41	LT					12.0					
15+50.92 to 15+59.67	LT					14.5					
16+88.46 to 16+99.24	RT					17.4					
17+41.46 to 17+50.10	RT					13.3					
17+65.05 to 17+72.65	LT					13.7					
17+98.36 to 18+03.69	LT					11.6					
20+22.57 to 20+26.88	LT					11.0					
20+47.37 to 20+51.45	LT					11.2					
22+60.07 to 22+65.07	RT					10.0					
22+60.07 to 22+65.07	LT					10.0					
23+01.76 to 23+06.01	RT					8.9					
23+05.28 to 23+09.58	LT					10.8					
23+28.07 to 23+32.25	RT					10.8					
23+30.71 to 23+34.42	LT					10.5					
25+77.94 to 25+87.17	LT					15.9					
26+16.88 to 26+22.61	LT					12.3					
28+68.72 to 28+76.74	LT					13.1					
30+84.84 to 30+90.70	RT					13.3					
30+86.59 to 30+93.21	LT					12.7					
31+16.38 to 31+23.23	LT					13.5					
31+17.65 to 31+23.15	RT					12.5					
31+76.40 to 31+81.40	RT					9.7					
31+76.40 to 31+81.40	LT					10.3					
33+35.10 to 33+41.71	LT					13.2					
SUB-TOTAL:				5683.8		324.3					

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-19

SUMMARY OF SIDEWALK & DETECTABLE WARNINGS

LOCATION STA. TO STA.	SIDE	CONC SIDEWALK 4" 0522 1 SY P	CONC SIDEWALK 4" 0522 1 SY F	CONC SIDEWALK 6" 0522 2 SY P	CONC SIDEWALK 6" 0522 2 SY F	DETECTABLE WARNINGS 0527 2 SF P	DETECTABLE WARNINGS 0527 2 SF F	DIRECTIONAL INDICATOR 0528-1 SF P	DIRECTIONAL INDICATOR 0528-1 SF F	DESIGN NOTES	CONSTRUCTION REMARKS
33+72.49 to 33+81.74	LT					18.0					
35+70.58 to 35+75.94	RT					8.6					
35+70.68 to 35+76.04	LT					8.7					
36+22.01 to 36+24.34	RT					8.7					
36+24.07 to 36+26.08	LT					8.6					
36+54.21 to 36+56.21	RT					8.6					
36+56.49 to 36+58.81	LT					8.9					
36+97.54 to 37+02.90	LT					8.6					
36+97.60 to 37+02.94	RT					8.6					
43+39.71 to 43+47.99	RT					13.9					
45+49.11 to 45+60.06	RT					17.6					
45+91.43 to 46+01.30	RT					16.0					
49+59.71 to 49+71.77	RT					26.1					
49+63.61 to 49+71.20	LT					17.4					
50+25.04 to 50+29.49	RT					9.9					
50+27.06 to 50+32.37	LT					9.6					
50+42.25 to 50+46.25	RT					8.7					
50+42.50 to 50+46.56	LT					8.8					
56+59.82 to 56+63.97	RT					10.8					
56+88.54 to 56+90.86	RT					10.1					
62+89.87 to 62+94.85	RT					15.4					
62+90.37 to 62+95.37	LT					10.0					
63+44.36 to 63+50.25	RT					12.7					
79+19.61 to 79+24.61	RT					10.0					
79+19.61 to 79+24.61	LT					10.0					
88+73.95 to 88+78.29	RT					13.3					
35+28.59 to 35+36.77	RT							12.0			
35+29.55 to 35+37.90	LT							12.0			
36+20.04 to 36+22.80	LT							12.0			
36+20.25 to 36+23.20	RT							12.0			
36+58.03 to 36+60.21	RT							12.0			
36+58.93 to 36+61.82	LT							11.7			
37+13.45 to 37+21.72	LT							11.9			
37+13.65 to 37+21.55	RT							12.0			
SUB-TOTAL:						307.6		95.6			

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-20

SUMMARY OF GUARDRAIL

LOCATION	SIDE	GUARDRAIL REMOVAL		DESIGN NOTES	CONSTRUCTION REMARKS
		0536 73			
STA. TO STA.		LF			
		P	F		
46+69.14 to 48+18.82	RT	150.0			
SUB-TOTAL:		150.0			
TOTAL:		150			

SUMMARY OF FENCING

PAY ITEM NO.	DESCRIPTION	LOCATION	SIDE	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
		STA. TO STA.			P	F	P	F		
0550 10248	FENCING, TYPE B, 7.1-8.0, RESET EXISTING	50+33.12 to 54+91.88	LT	LF	467.5		468			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-21

SUMMARY OF PERFORMANCE TURF

LOCATION STA. TO STA.	SIDE	PERFORMANCE TURF (SOD) 0570 1 2 SY P	 F	DESIGN NOTES	CONSTRUCTION REMARKS
12+18.23 to 13+06.24	RT	27.1			
12+58.30 to 12+74.71	LT	7.7			
13+32.74 to 13+61.91	RT	14.4			
13+97.87 to 14+45.99	LT	9.9			
14+94.30 to 15+22.56	LT	10.8			
15+55.86 to 17+68.27	LT	161.1			
16+03.80 to 16+13.81	RT	3.2			
17+54.95 to 17+68.23	RT	3.3			
17+74.43 to 17+86.01	RT	1.3			
18+01.15 to 18+08.16	LT	2.8			
18+12.47 to 20+12.91	LT	260.3			
20+17.25 to 20+24.75	LT	4.0			
20+49.31 to 20+57.53	LT	4.4			
20+61.86 to 22+60.07	LT	302.3			
22+65.07 to 22+95.37	LT	43.9			
22+99.70 to 23+07.56	LT	4.0			
23+29.99 to 23+38.27	RT	4.6			
23+32.23 to 23+43.66	LT	8.2			
23+42.59 to 23+65.76	RT	13.0			
23+48.34 to 23+71.43	LT	24.1			
23+99.99 to 24+30.00	RT	9.1			
26+03.48 to 26+51.50	RT	17.9			
27+25.18 to 27+74.85	RT	36.2			
27+40.99 to 27+74.86	RT	13.3			
34+95.18 to 36+23.61	RT	48.0			
34+95.20 to 35+30.02	RT	19.7			
35+10.39 to 35+31.01	LT	10.4			
35+14.41 to 36+21.31	LT	42.8			
35+33.86 to 35+71.26	RT	25.1			
35+35.52 to 35+43.27	LT	3.2			
35+55.72 to 35+71.26	LT	8.5			
35+75.26 to 36+14.29	LT	14.4			
35+75.76 to 36+19.30	RT	21.0			
36+15.90 to 36+26.10	LT	12.7			
36+16.92 to 36+23.87	RT	8.7			
36+18.32 to 36+24.55	RT	3.4			
36+19.72 to 36+26.17	RT	3.6			
36+20.05 to 36+26.07	LT	8.6			
36+20.70 to 36+30.31	LT	22.2			
36+49.90 to 36+60.21	RT	15.2			
36+54.20 to 36+60.21	RT	6.7			
36+54.21 to 36+60.21	RT	4.5			
36+55.83 to 36+62.56	LT	7.0			
36+56.67 to 36+98.67	RT	22.5			
36+56.99 to 36+98.23	LT	42.2			
36+66.79 to 37+34.45	LT	55.0			
37+02.23 to 37+16.51	LT	8.8			
SUB-TOTAL:		1401.1			
TOTAL:		7009			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-22

SUMMARY OF PERFORMANCE TURF

LOCATION	SIDE	PERFORMANCE TURF (SOD) 0570 1 2 SY		DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.		P	F		
37+02.67 to 37+16.79	RT	8.9			
37+21.87 to 37+34.44	LT	4.5			
43+02.32 to 43+14.13	LT	8.8			
43+19.45 to 43+35.17	LT	12.7			
46+30.90 to 47+51.17	RT	89.3			
47+33.69 to 47+45.69	LT	2.4			
47+51.17 to 48+37.69	RT	38.0			
47+54.19 to 47+69.85	LT	5.3			
49+50.16 to 49+75.80	RT	13.1			
50+28.73 to 50+41.97	RT	6.9			
50+52.08 to 50+58.44	RT	1.1			
50+52.48 to 54+90.72	LT	284.5			
50+67.56 to 51+63.76	RT	21.7			
50+92.14 to 52+23.55	LT	20.8			
52+68.15 to 54+32.16	LT	22.8			
54+71.54 to 55+10.93	LT	18.0			
55+37.40 to 55+77.14	LT	18.5			
55+53.18 to 56+58.87	RT	67.5			
55+55.74 to 58+84.06	LT	210.8			
56+95.03 to 58+13.58	RT	73.3			
58+52.15 to 59+05.39	LT	24.6			
58+52.64 to 58+71.64	RT	23.3			
58+84.13 to 59+00.47	LT	5.2			
58+96.64 to 59+27.84	RT	41.3			
59+52.84 to 59+65.28	RT	10.2			
59+77.29 to 60+03.14	LT	10.0			
59+77.40 to 59+85.52	LT	2.7			
59+85.55 to 62+90.37	LT	199.9			
59+92.70 to 60+01.97	RT	1.5			
60+26.97 to 60+39.45	RT	2.7			
62+29.81 to 62+37.22	RT	1.7			
62+61.97 to 62+70.27	RT	1.0			
62+94.83 to 63+00.74	RT	6.0			
62+95.37 to 63+17.48	LT	11.5			
63+66.06 to 76+18.75	LT	827.2			
63+72.23 to 66+05.13	RT	51.6			
66+46.77 to 68+70.04	RT	50.5			
69+06.09 to 69+35.91	RT	22.5			
69+39.69 to 69+65.87	RT	6.7			
69+90.12 to 70+05.08	RT	6.1			
69+99.00 to 72+30.92	RT	145.8			
70+22.93 to 71+13.02	LT	36.5			
72+94.48 to 73+32.81	RT	14.1			
73+70.39 to 75+08.70	RT	325.6			
75+23.18 to 79+19.61	RT	780.1			
76+79.67 to 79+19.61	LT	156.9			
79+24.61 to 82+49.66	RT	528.8			
80+12.29 to 80+77.96	LT	39.6			
SUB-TOTAL:		4262.5			

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-23

SUMMARY OF PERFORMANCE TURF

LOCATION STA. TO STA.	SIDE	PERFORMANCE TURF (SOD) 0570 1 2 SY P	 F	DESIGN NOTES	CONSTRUCTION REMARKS
82+69.66 to 83+96.59	RT	95.9			
83+84.06 to 85+05.41	LT	116.9			
84+10.42 to 85+11.68	LT	70.6			
84+21.48 to 87+93.63	RT	242.8			
84+21.48 to 87+93.63	RT	242.8			
84+21.48 to 88+44.73	RT	311.0			
85+46.77 to 88+44.72	LT	196.8			
85+52.89 to 86+64.86	LT	68.6			
SUB-TOTAL:		1345.4			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO.
SQ-24

STATE OF FLORIDA

CITY OF TAMPA

WALK-BIKE LAP PROJECT

FINANCIAL PROJECT ID 437246-1-58-01

CITY PROJECT NO. 1001220

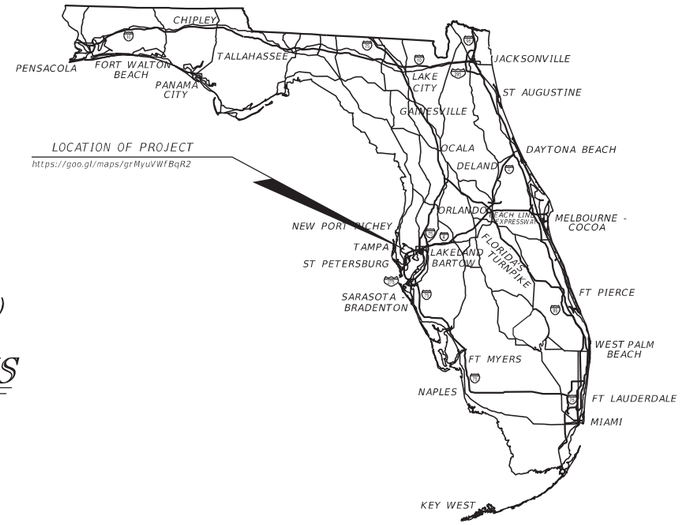
HILLSBOROUGH COUNTY

46TH STREET FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)

SIGNING AND PAVEMENT MARKING PLANS

INDEX OF SIGNING AND PAVEMENT MARKING PLANS

SHEET NO.	SHEET DESCRIPTION
S-1	KEY SHEET
S-2 - S-4	TABULATION OF QUANTITIES
S-5	GENERAL NOTES
S-6 - S-21	PLAN SHEETS
S-22	GUIDE SIGN WORKSHEET



JEFFREY SIEWERT LICENSE No 39196 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Jeffrey J Siewert
2020.04.27 11:30:34 -04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SIGNING AND PAVEMENT MARKING PLANS ENGINEER OF RECORD:

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CONSTRUCTION PLANS
MARCH 2020

CITY OF TAMPA PROJECT MANAGER:

NINA MABILLEAU, E.I.

FISCAL YEAR	SHEET NO.
21	S-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			S-06		S-07		S-08		S-09		S-10		S-11		S-12					
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL
0700 1 11	SINGLE POST SIGN, F&I GROUNDMOUNT, UP TO 12 SF	AS	3		1		2		1		2		1				10			
0700 1 12	SINGLE POST SIGN, F&I GROUNDMOUNT, 12-20 SF	AS																		
0700 1 50	SINGLE POST SIGN, RELOCATE	AS																		
0700 1 60	SINGLE POST SIGN, REMOVE	AS	1						3		1		1				6			
0700 3401	SIGN PANEL, INSTALL, UP TO 12 SF	EA					2										2			
0700 3601	SIGN PANEL, REMOVE, UP TO 12 SF	EA					2										2			
0710 90	PAINTED PAVEMENT MARKINGS - FINAL SURFACE	LS															1			
*	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	13												2		15			
*	PAINTED PM, STD, WHITE, SOLID, 6"	GM	0.116		0.171		0.168		0.182		0.146		0.172		0.186		1.133			
*	PAINT, STD., WHITE, SOLID, CROSSWALK/RA, 12"	LF	61.4				39.7				40.1						141.1			
*	PAINT, WHITE, SOLID, STOP LINES/CROSSWALK, 24"	LF	80.8		33.1		26.2		24.0		23.7						187.7			
*	PAINT, STD., WHITE, GUIDE LINE, 6" (2/4)	GM	0.014												0.009		0.014			
*	PAINT, STD., WHITE, GUIDE LINE, 12" (2/4)	GM																		
*	PAINT, STD., MESSAGE OR SYMBOL (YIELD)	EA																		
*	PAINT, STD., ARROWS (LEFT)	EA	1														1			
*	PAINTED PM, STD, YELLOW, SOLID, 6"	GM	0.131		0.157		0.156		0.164		0.116		0.172		0.198		1.093			
*	PAINT, STD., YELLOW, SOLID, DIAG/CHEVRONS, 18"	LF	21.2												64.1		85.2			
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF																		
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	80.8		33.1		26.2		24.0		23.7						187.7			
0711 11141	THERMO., STD., WHITE, GUIDE LINE, 6" (2/4)	GM	0.014												0.009		0.014			
0711 11143	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE, 12" FOR ROUNDABOUT	GM																		
0711 11160	THERMO., STD., MESSAGE OR SYMBOL (YIELD)	EA																		
0711 11170	THERMO., STD., ARROWS (LEFT)	EA	1														1			
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONAL OR CHEVRONS	LF	21.2												64.1		85.2			
0711 14123	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 12" FOR CROSSWALK	LF	61.4				39.7				40.1						141.1			
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	LF	40.4				30.0				30.0						100.3			
0711 14160	THERMO., PREFORMED, MESSAGE OR SYMBOL (SHARED)	EA	4		4		4		5		3		2		4		26			
0711 16101	THERMOPLASTIC, STANDARD, OTHER SURFACES, WHITE, SOLID, 6"	GM	0.116		0.171		0.168		0.182		0.146		0.172		0.186		1.133			
0711 16201	THERMOPLASTIC, STANDARD, OTHER SURFACES, YELLOW, SOLID, 6"	GM	0.131		0.157		0.156		0.164		0.116		0.172		0.198		1.093			

* THESE QUANTITIES ARE PAID FOR UNDER PAINTED PAVEMENT MARKINGS (FINAL SURFACE), LUMP SUM - ITEM NO. 710-90. THE QUANTITIES SHOWN ARE FOR ONE APPLICATION; SEE SPECIFICATION 710 FOR THE NUMBER OF APPLICATIONS REQUIRED.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TABULATION OF QUANTITIES

SHEET NO. S-2

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			S-13		S-14		S-15		S-16		S-17		S-18		S-19					
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL
0700 1 11	SINGLE POST SIGN, F&I GROUNDMOUNT, UP TO 12 SF	AS			2		3		2				3		3		13			
0700 1 12	SINGLE POST SIGN, F&I GROUNDMOUNT, 12-20 SF	AS																		
0700 1 50	SINGLE POST SIGN, RELOCATE	AS			1												1			
0700 1 60	SINGLE POST SIGN, REMOVE	AS																		
0700 3401	SIGN PANEL, INSTALL, UP TO 12 SF	EA	2		1		1										4			
0700 3601	SIGN PANEL, REMOVE, UP TO 12 SF	EA	2		1		1										4			
0710 90	PAINTED PAVEMENT MARKINGS - FINAL SURFACE	LS															1			
*	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	29														27			
*	PAINTED PM, STD, WHITE, SOLID, 6"	GM	0.231		0.202		0.191		0.212		0.212		0.208		0.213		1.469			
*	PAINT, STD., WHITE, SOLID, CROSSWALK/RA, 12"	LF	402.2				86.0						47.5				535.7			
*	PAINT, WHITE, SOLID, STOP LINES/CROSSWALK, 24"	LF	401.3		12.3		35.3						112.9				561.9			
*	PAINT, STD., WHITE, GUIDE LINE, 6" (2/4)	GM	0.023														0.02			
*	PAINT, STD., WHITE, GUIDE LINE, 12" (2/4)	GM																		
*	PAINT, STD., MESSAGE OR SYMBOL (YIELD)	EA																		
*	PAINT, STD., ARROWS (LEFT)	EA	6														4			
*	PAINTED PM, STD, YELLOW, SOLID, 6"	GM	0.282		0.191		0.178		0.212		0.212		0.208		0.212		1.496			
*	PAINT, STD., YELLOW, SOLID, DIAG/CHEVRONS, 18"	LF	89.0														89.0			
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	402.2														402.2			
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	401.3		12.3		35.3						112.9				561.9			
0711 11141	THERMO., STD., WHITE, GUIDE LINE, 6" (2/4)	GM	0.023														0.02			
0711 11143	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE, 12" FOR ROUNDABOUT	GM																		
0711 11160	THERMO., STD., MESSAGE OR SYMBOL (YIELD)	EA																		
0711 11170	THERMO., STD., ARROWS (LEFT)	EA	6														4			
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONAL OR CHEVRONS	LF	89.0														89.0			
0711 14123	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 12" FOR CROSSWALK	LF					86.0						47.5				133.5			
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	LF					70.0						30.0		17.1		117.1			
0711 14160	THERMO., PREFORMED, MESSAGE OR SYMBOL (SHARED)	EA	7		4		6		4		4		4		6		33			
0711 16101	THERMOPLASTIC, STANDARD, OTHER SURFACES, WHITE, SOLID, 6"	GM	0.231		0.202		0.191		0.212		0.212		0.208		0.213		1.469			
0711 16201	THERMOPLASTIC, STANDARD, OTHER SURFACES, YELLOW, SOLID, 6"	GM	0.282		0.191		0.178		0.212		0.212		0.208		0.212		1.496			

* THESE QUANTITIES ARE PAID FOR UNDER PAINTED PAVEMENT MARKINGS (FINAL SURFACE), LUMP SUM - ITEM NO. 710-90. THE QUANTITIES SHOWN ARE FOR ONE APPLICATION; SEE SPECIFICATION 710 FOR THE NUMBER OF APPLICATIONS REQUIRED.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TABULATION OF QUANTITIES

SHEET NO. S-3

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			S-20		S-21															
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL
0700 1 11	SINGLE POST SIGN, F&I GROUNDMOUNT, UP TO 12 SF	AS			19												19		42	
0700 1 12	SINGLE POST SIGN, F&I GROUNDMOUNT, 12-20 SF	AS			1												1		1	
0700 1 50	SINGLE POST SIGN, RELOCATE	AS			1												1		2	
0700 1 60	SINGLE POST SIGN, REMOVE	AS			2												2		8	
0700 3401	SIGN PANEL, INSTALL, UP TO 12 SF	EA																	6	
0700 3601	SIGN PANEL, REMOVE, UP TO 12 SF	EA																	6	
0710 90	PAINTED PAVEMENT MARKINGS - FINAL SURFACE	LS																	1	
*	RETRO-REFLECTIVE PAVEMENT MARKERS	EA																	42	
*	PAINTED PM, STD, WHITE, SOLID, 6"	GM	0.055		0.168												0.223		2.825	
*	PAINT, STD., WHITE, SOLID, CROSSWALK/RA, 12"	LF			210.6												210.6		887	
*	PAINT, WHITE, SOLID, STOP LINES/CROSSWALK, 24"	LF			160.0												160.0		910	
*	PAINT, STD., WHITE, GUIDE LINE, 6" (2/4)	GM																	0.037	
*	PAINT, STD., WHITE, GUIDE LINE, 12" (2/4)	GM			0.026												0.026		0.026	
*	PAINT, STD., MESSAGE OR SYMBOL (YIELD)	EA			4												4		4	
*	PAINT, STD., ARROWS (LEFT)	EA																	5	
*	PAINTED PM, STD, YELLOW, SOLID, 6"	GM	0.055		0.130												0.185		2.774	
*	PAINT, STD., YELLOW, SOLID, DIAG/CHEVRONS, 18"	LF																	174	
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF			210.6												210.6		613	
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF			160.0												160.0		910	
0711 11141	THERMO., STD., WHITE, GUIDE LINE, 6" (2/4)	GM																	0.037	
0711 11143	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE, 12" FOR ROUNDABOUT	GM			0.026												0.026		0.026	
0711 11160	THERMO., STD., MESSAGE OR SYMBOL (YIELD)	EA			4												4		4	
0711 11170	THERMO., STD., ARROWS (LEFT)	EA																	5	
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONAL OR CHEVRONS	LF																	174	
0711 14123	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 12" FOR CROSSWALK	LF																	275	
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	LF																	217	
0711 14160	THERMO., PREFORMED, MESSAGE OR SYMBOL (SHARED)	EA	2														2		61	
0711 16101	THERMOPLASTIC, STANDARD, OTHER SURFACES, WHITE, SOLID, 6"	GM	0.055		0.168												0.223		2.825	
0711 16201	THERMOPLASTIC, STANDARD, OTHER SURFACES, YELLOW, SOLID, 6"	GM	0.055		0.130												0.185		2.774	

* THESE QUANTITIES ARE PAID FOR UNDER PAINTED PAVEMENT MARKINGS (FINAL SURFACE), LUMP SUM - ITEM NO. 710-90. THE QUANTITIES SHOWN ARE FOR ONE APPLICATION; SEE SPECIFICATION 710 FOR THE NUMBER OF APPLICATIONS REQUIRED.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TABULATION OF QUANTITIES

SHEET NO. S-4

GENERAL NOTES

SIGNING AND PAVEMENT MARKING

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND REPLACE ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS. IF SIGNS ARE DAMAGED BY THE CONTRACTOR, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

2. FOR RETRO-REFLECTIVE PAVEMENT MARKER PLACEMENT DETAILS, REFER TO FDOT STANDARD PLANS INDEX 706-001.

3. ALL CROSSWALKS ARE 10' WIDE.

   RPM LEGEND
   BDWR = BI-DIRECTIONAL WHITE/RED
   BDY = BI-DIRECTIONAL YELLOW

4. ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED IN THE PLANS. EXISTING SIGNS SHOWN FOR INFORMATION ONLY.

5. ALL CALLOUTS ARE TO CENTERLINE OF CONSTRUCTION OF 46TH STREET, UNLESS NOTED OTHERWISE.

6. ALL REMOVED SIGNS AND THEIR SUPPORTS BECOME THE PROPERTY OF THE CONTRACTOR TO BE DISPOSED OF PROPERLY UNLESS OTHERWISE NOTED.

7. ALL PEDESTRIAN CROSSING SIGNS W11-02 AND W16-7P WILL USE A FLUORESCENT YELLOW-GREEN BACKGROUND COLOR.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

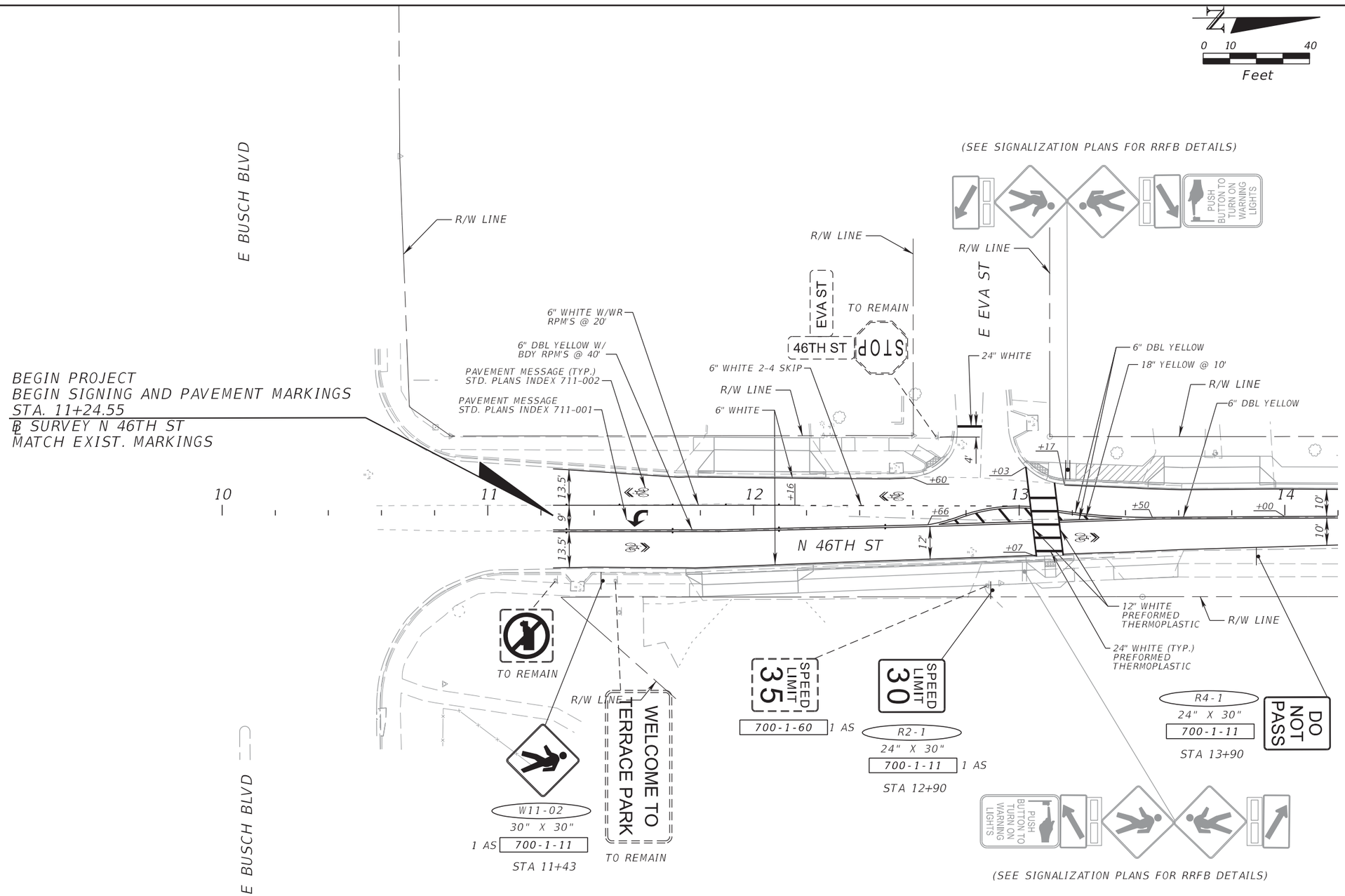
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

GENERAL NOTES

SHEET NO. S-5



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

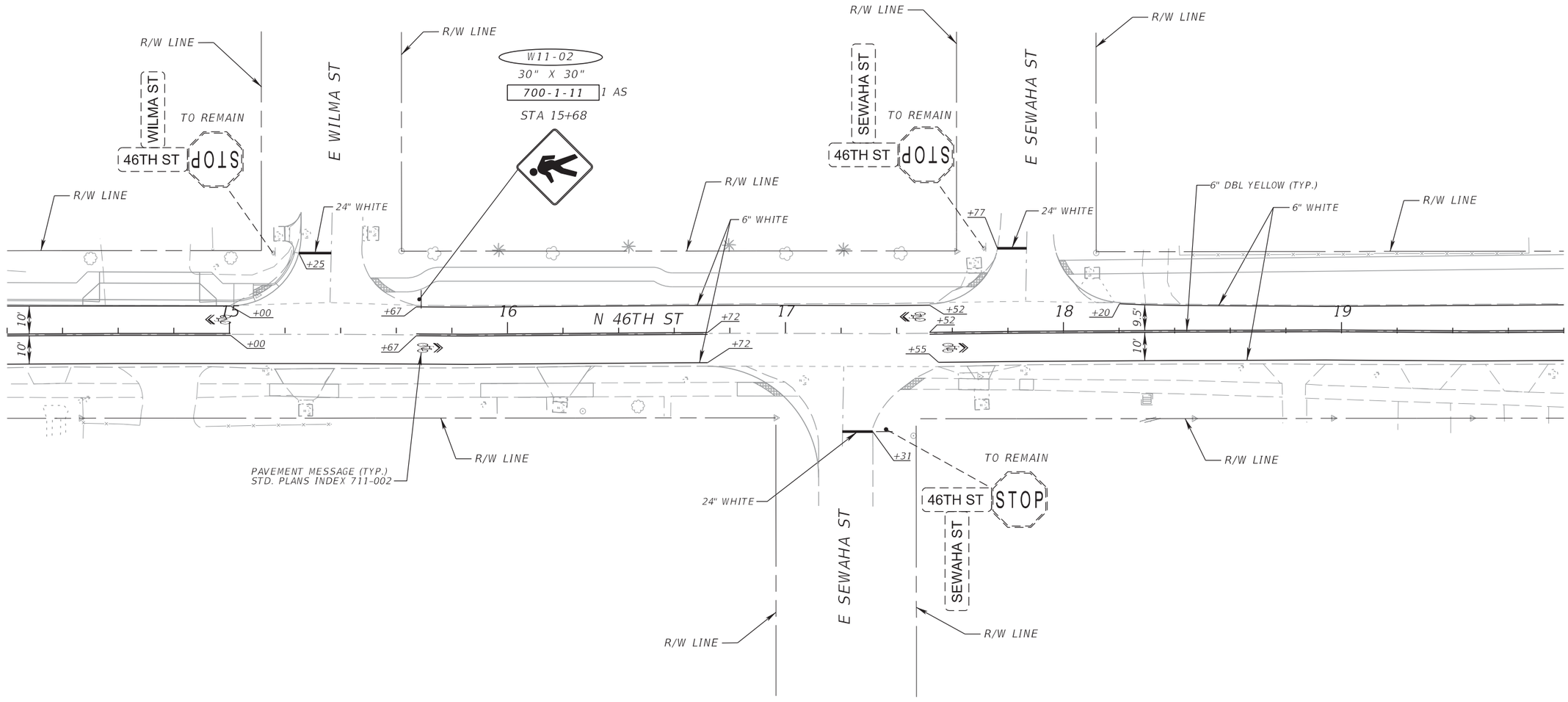
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO. S-6



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO. S-7

0 10 40
Feet

(SEE SIGNALIZATION PLANS FOR RRFB DETAILS)

PUSH BUTTON TO TURN ON WARNING LIGHTS

R2-1
36" X 36"
700-3-401 1 AS
STA 22+20

700-3-601
SPEED LIMIT 35

SPEED LIMIT 30

W11-02
30" X 30"
700-1-11
STA 25+18

R/W LINE
TO REMAIN
E RICHMERE ST
RICHMERE ST
46TH ST
STOP
E TEMPLE HEIGHTS RD
N 46TH ST
20
21
22
23
24
25
+00
+30
+70
+86
+82
+10
+55
+54
+27
24" WHITE
6" WHITE
12" WHITE PREFORMED THERMOPLASTIC
24" WHITE (TYP.) PREFORMED THERMOPLASTIC
4'
9'
10'
11'
9.5'
PAVEMENT MESSAGE (TYP.) STD. PLANS INDEX 711-002
6" DBL YELLOW (TYP.)
TEMPLE HEIGHTS RD

W11-02
30" X 30"
700-1-11 1 AS
STA 20+07

(SEE SIGNALIZATION PLANS FOR RRFB DETAILS)

R2-1
24" X 30"
700-3-401 1 AS
STA 24+27

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

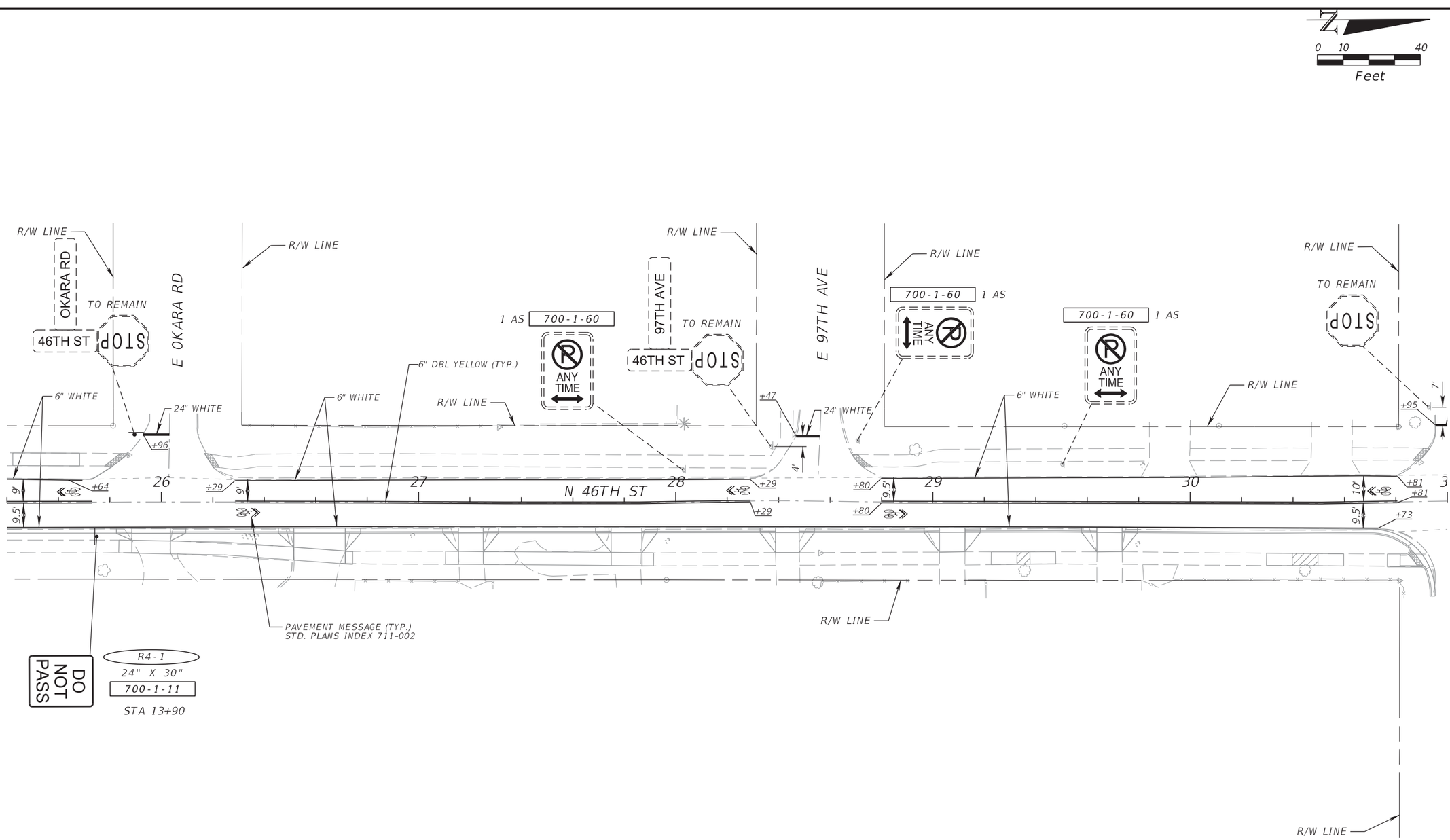
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO. S-8



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

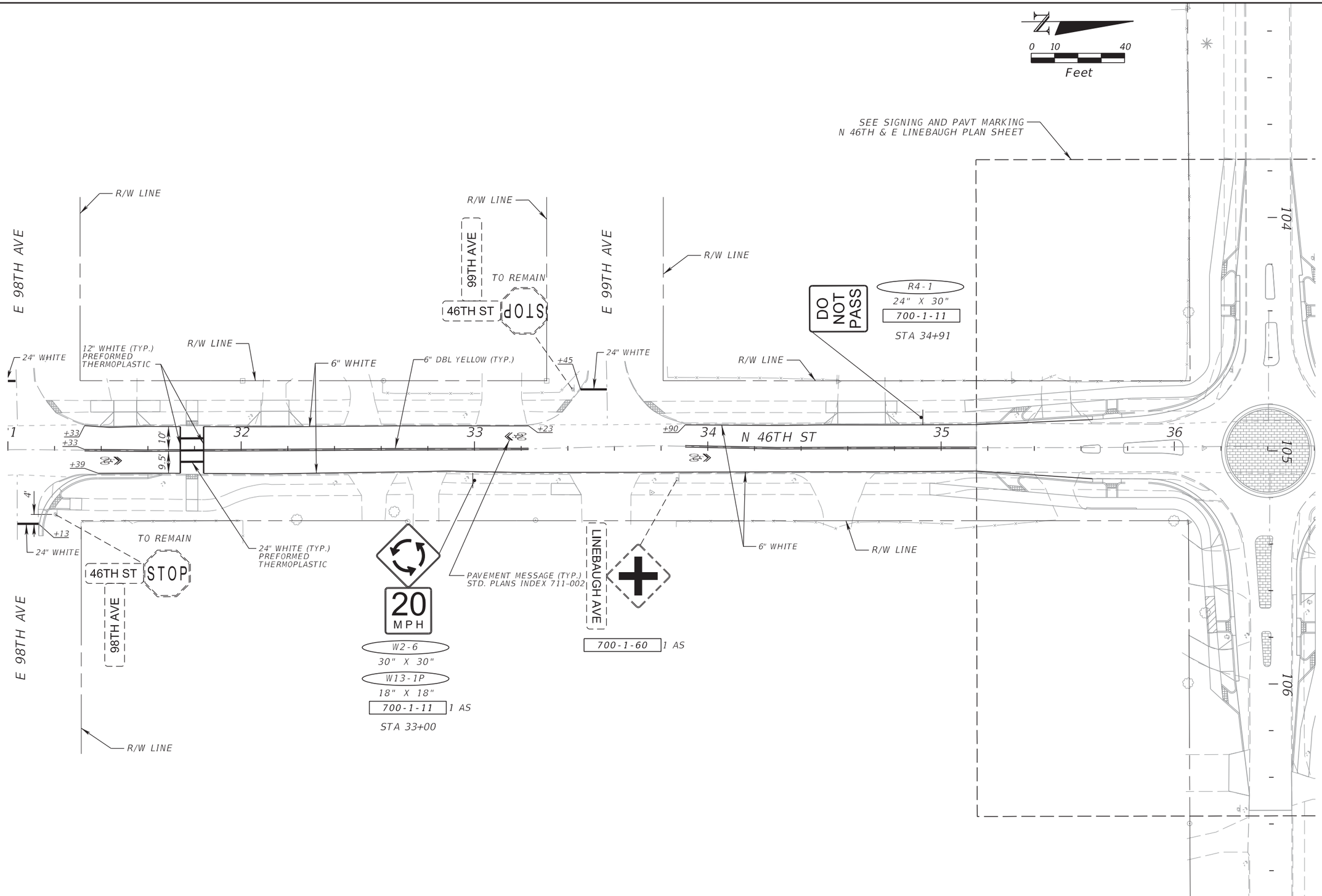
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO. S-9



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO.
S-10

0 10 40
Feet

SEE SIGNING AND PAVT MARKING
N 46TH & E LINEBAUGH PLAN SHEET

700-1-60 1 AS

LINEBAUGH AVE

W2-6
30" X 30"
W13-1P
18" X 18"
700-1-11 1 AS

STA 39+61

20 MPH

R/W LINE

6" WHITE

6" DBL YELLOW (TYP.)

37 38 39 40 41 42

10' 10'

N 46TH ST

R/W LINE

PAVEMENT MESSAGE (TYP.)
STD. PLANS INDEX 711-002

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

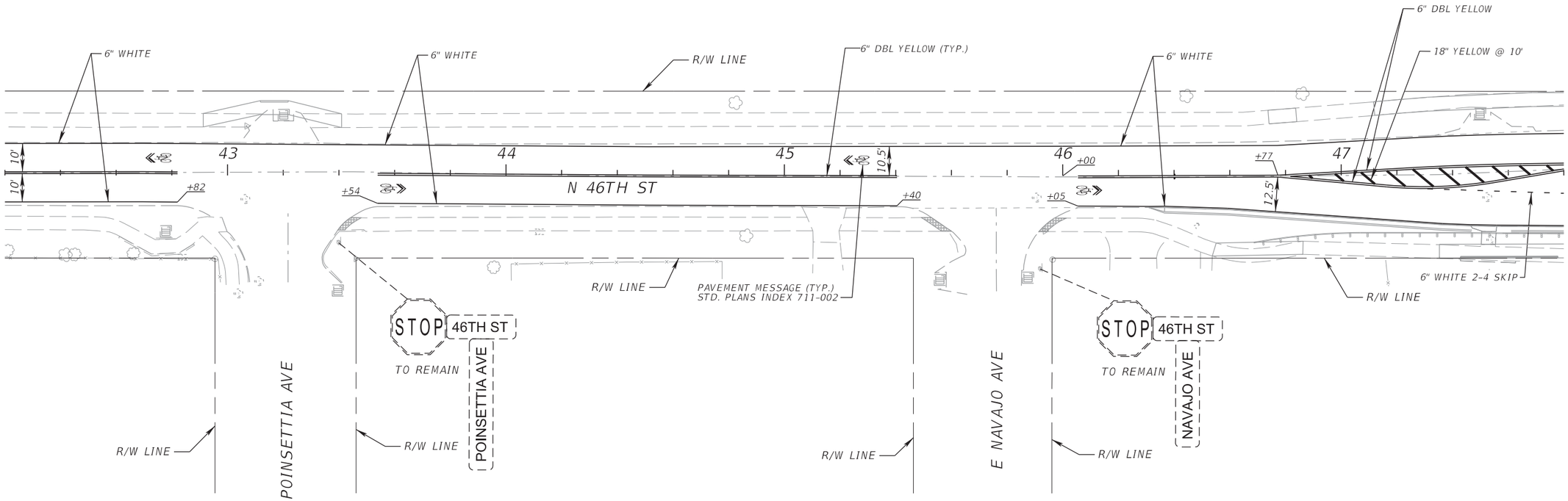
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO.
S-11

0 10 40
Feet



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

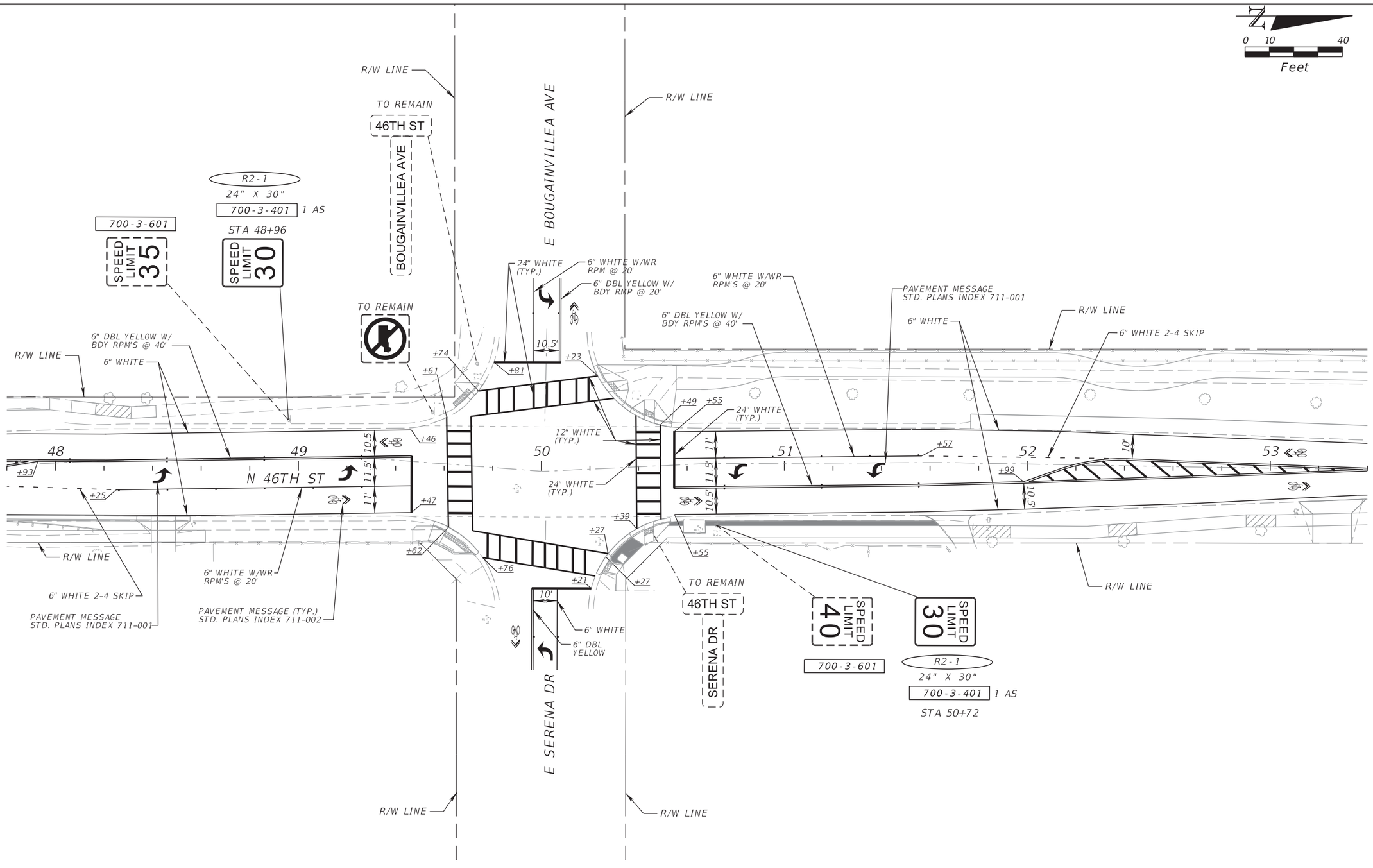
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO.
S-12



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO.
S-13

0 10 40

Feet

R1-1
30" X 30"
700-1-11 1 AS
STA 55+08

STOP

6" WHITE

6" DBL YELLOW (TYP.)

R/W LINE

DO NOT PASS

R4-1
24" X 30"
700-1-11
STA 57+35

6" WHITE

700-1-50 1 AS
STA 58+85

TRUCK ENTRANCE

+47 54 +46 55 56 57 58 5

10' 10' 9.5' 10'

N 46TH ST

+49 +04

PAVEMENT MESSAGE (TYP.)
STD. PLANS INDEX 711-002

R/W LINE

E SENECA AVE

TO REMAIN

STOP 46TH ST

SENECA AVE

SPEED LIMIT 40

700-3-601

SPEED LIMIT 30

R2-1
24" X 30"
700-3-401 1 AS
STA 52+79

R/W LINE

R/W LINE

R/W LINE

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO.
S-14

0 10 40
Feet

R1-1
30" X 30"
700-1-11 1 AS
STA 59+04

STOP

24" WHITE

PAVEMENT MESSAGE (TYP.)
STD. PLANS INDEX 711-002

6" WHITE

6" DBL YELLOW (TYP.)

R/W LINE

(SEE SIGNALIZATION PLANS FOR RRFB DETAILS)

PUSH BUTTON TO TURN ON WARNING LIGHTS

R10-15R
30" X 30"
700-1-11 1 AS
STA 63+15

TURNING VEHICLES TO

TO REMAIN

STOP

700-3-601

SPEED LIMIT 40

R2-1
24" X 30"
700-3-401 1 AS
STA 64+04

SPEED LIMIT 30

6" WHITE

+88

9 60 61 62 63 64

9.5' 10' 10' 9.5'

N 46TH ST

12" WHITE PREFORMED THERMOPLASTIC

24" WHITE (TYP.) PREFORMED THERMOPLASTIC

+89

+88

+39

R/W LINE

W11-02
30" X 30"
700-1-11 1 AS
STA 60+37

PARK 46 APARTMENTS
TO REMAIN

PUSH BUTTON TO TURN ON WARNING LIGHTS

(SEE SIGNALIZATION PLANS FOR RRFB DETAILS)

46TH ST

WHITEWAY DR

TO REMAIN

R/W LINE

24" WHITE

6" DBL YELLOW

TO REMAIN

STOP 46TH ST

WHITEWAY DR

E WHITEWAY DR

R/W LINE

R/W LINE

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

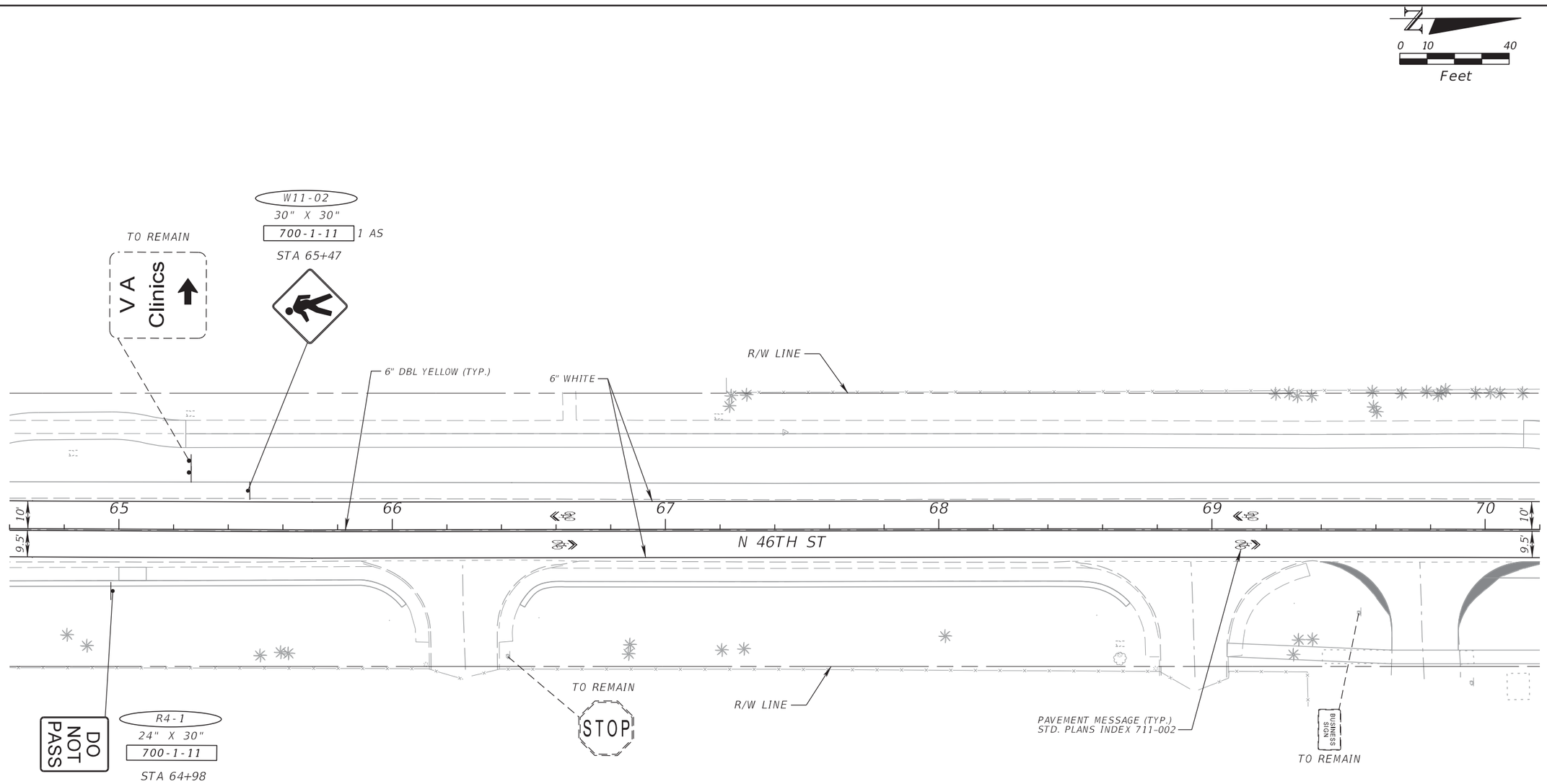
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO.
S-15



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

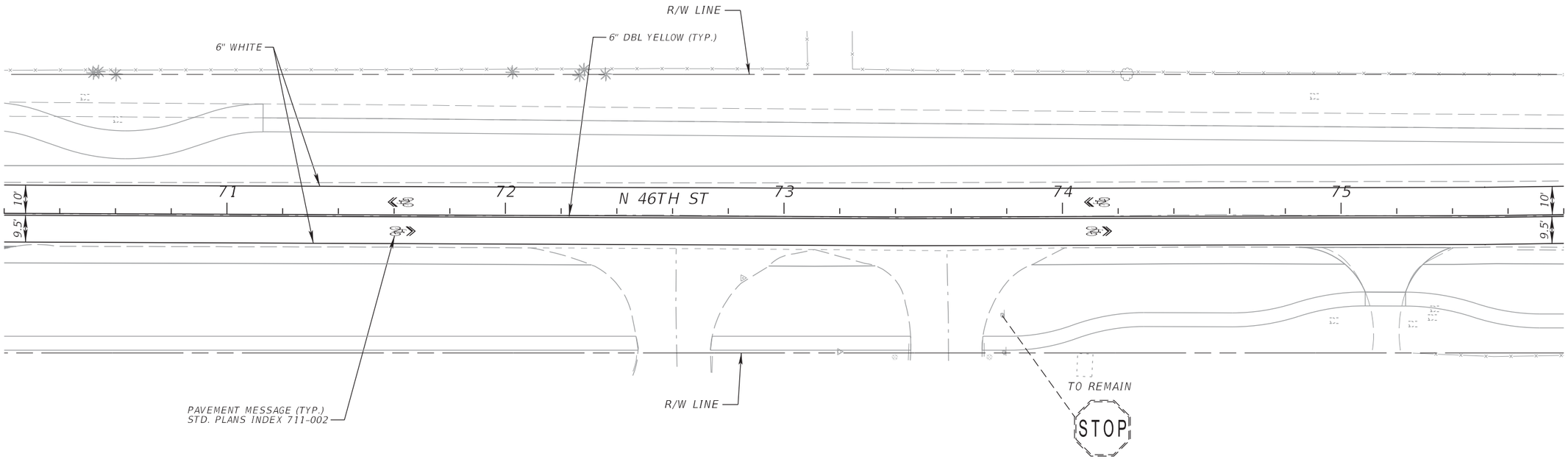
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO. S-16



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

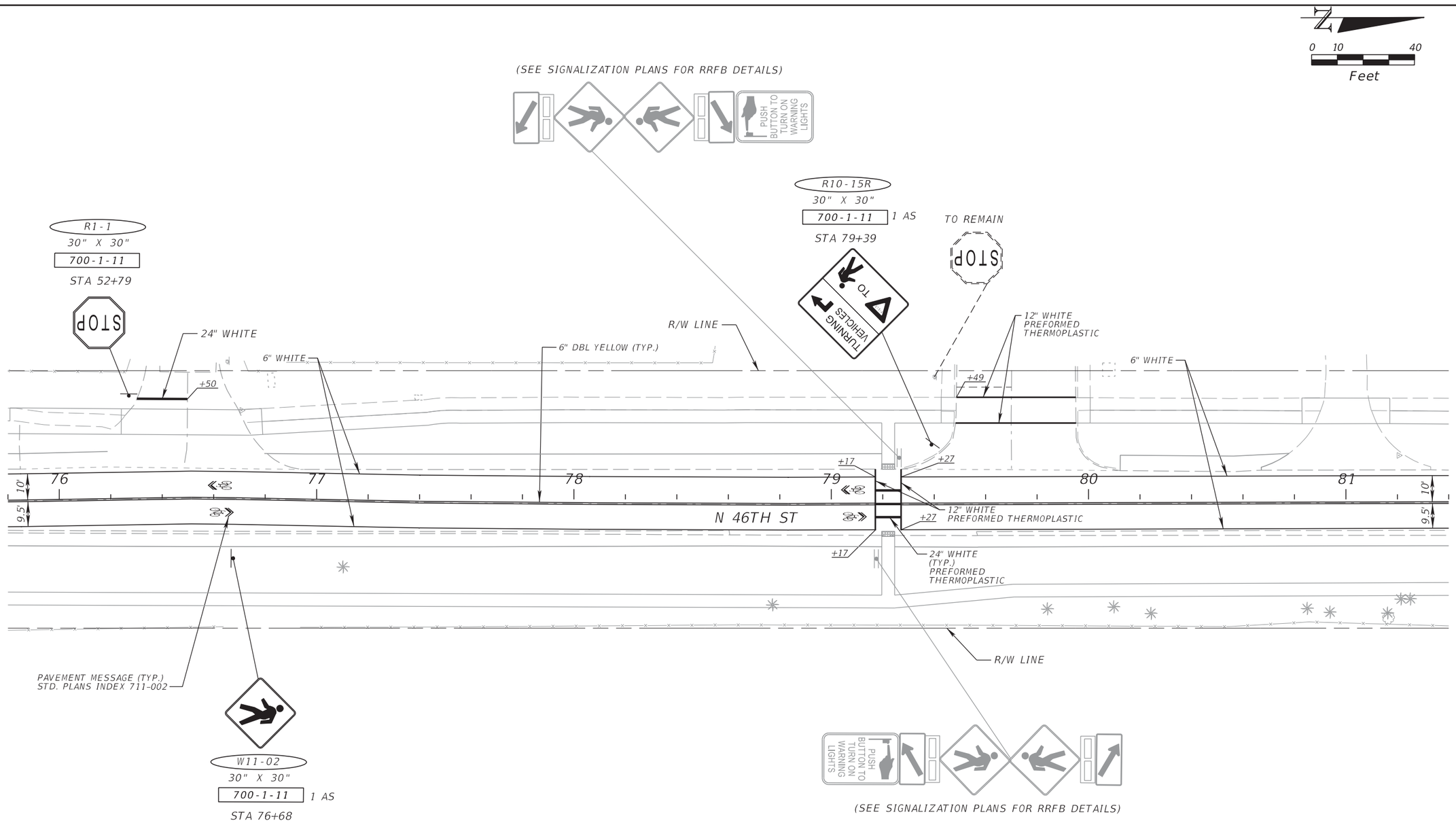
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO.
S-17



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

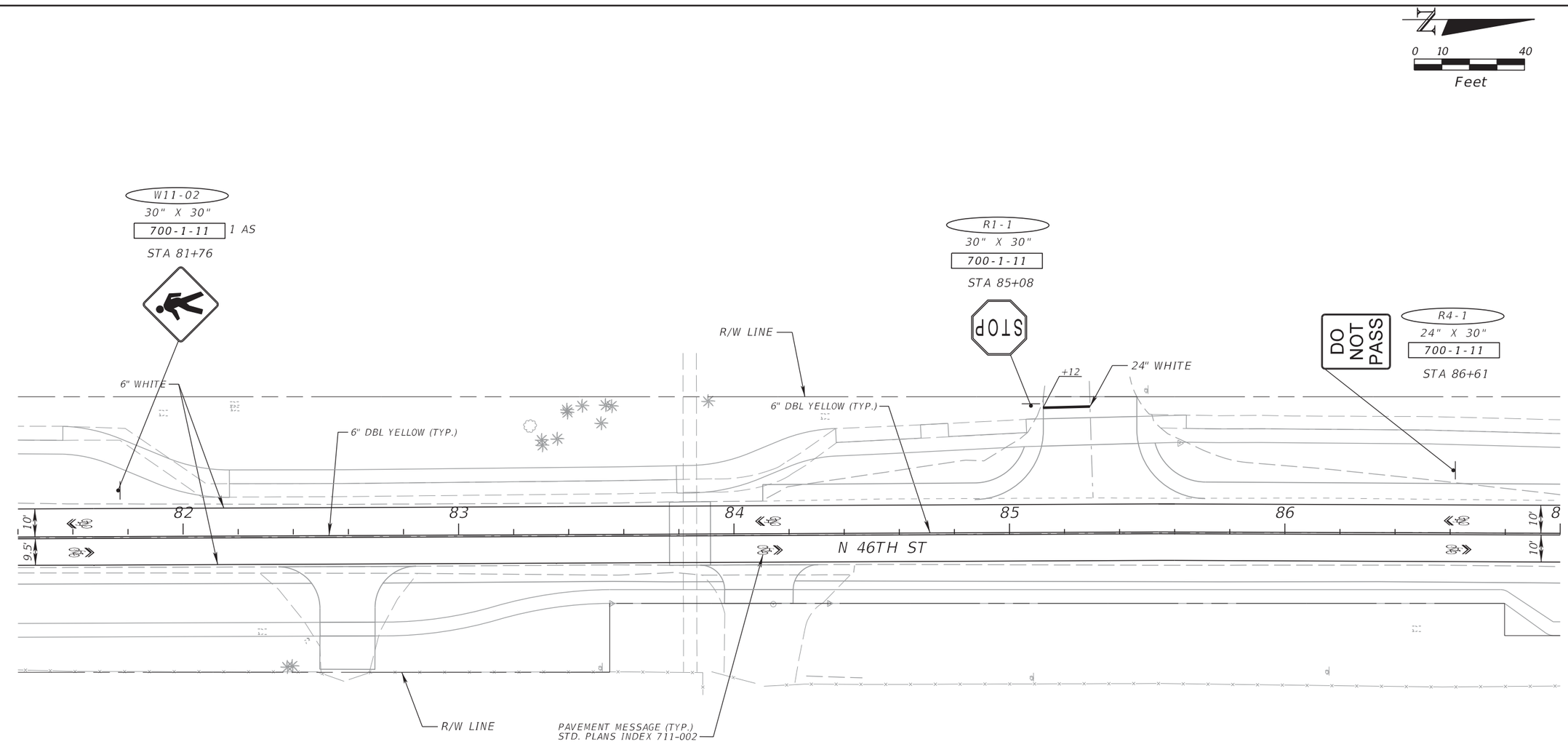
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO. S-18



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

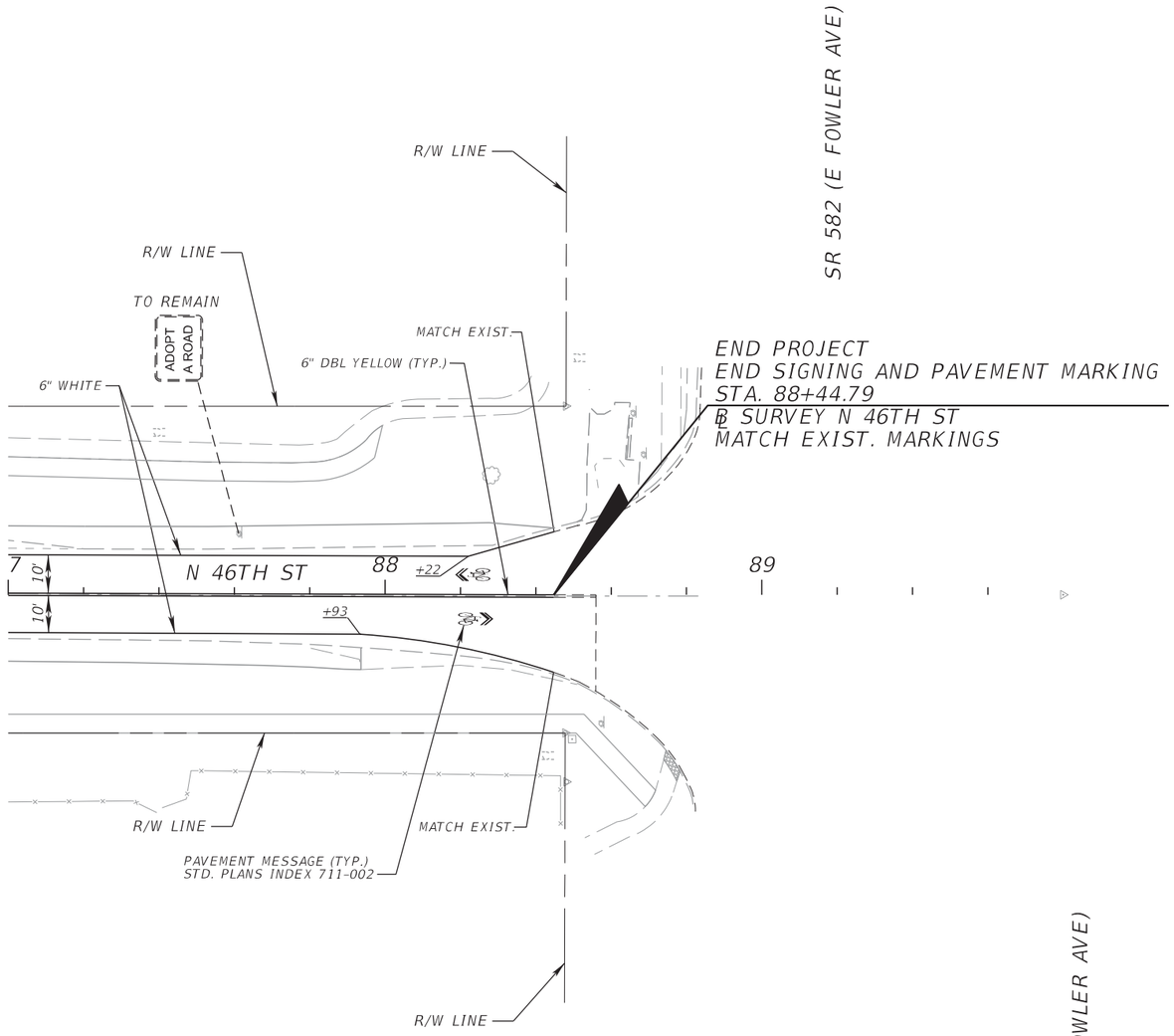
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO. S-19



N

0 10 40

Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

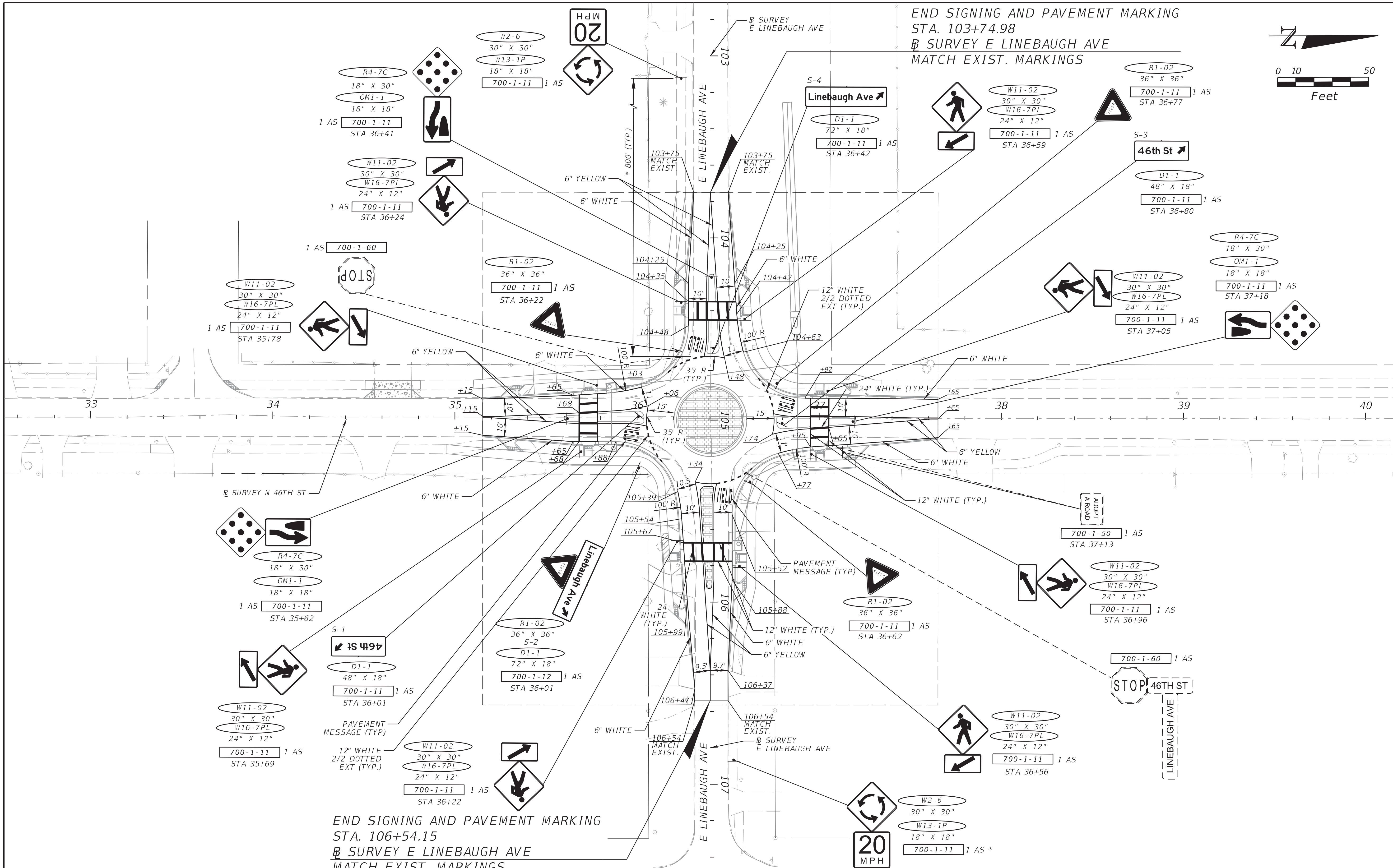
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING AND PAVEMENT MARKING PLAN SHEET

SHEET NO.

S-20



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNING & PAVT MARKING
N 46TH & E LINEBAUGH

SHEET NO.
S-21

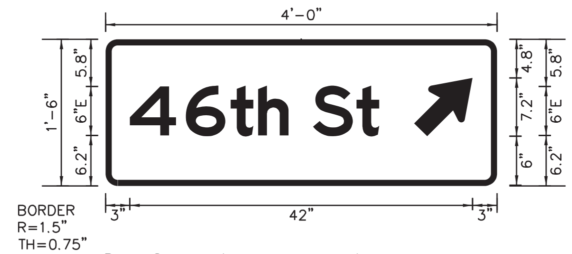
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

SIGN NAME	S-1 & S-3	QTY	2	SIGN NUMBER	STATION(S)
PANEL		BORDER		1	36+01
WIDTH	4'-0"	WIDTH	0.75"	2	36+80
HEIGHT	1'-6"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT
AR_Type D	315	37.8	6.1	6	9

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE ALUM.		AVERAGE LENGTH
1	1	3.5'	3" O.D.		13'
2	1	3.5'	3" O.D.		13'

NO. OF LIGHT FIXTURES		FIXTURE SPACING		WATT	
PHOTOMETRIC CURVE			VOLTAGE		



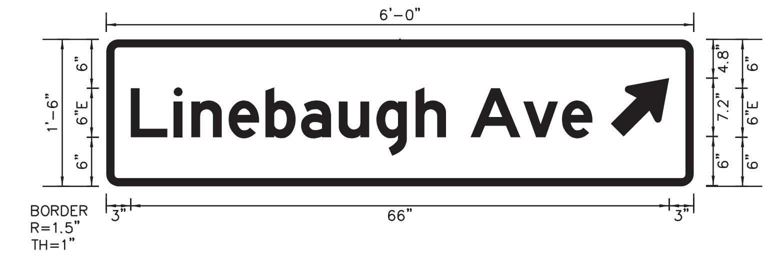
Panel Style: guide_con_street.ssi
M.U.T.C.D.: 2009 Edition

SIGN NAME	S-2 & S-4	QTY	2	SIGN NUMBER	STATION(S)
PANEL		BORDER		1	36+01
WIDTH	6'-0"	WIDTH	1"	2	36+42
HEIGHT	1'-6"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT
AR_Type D	315	61.8	6.1	6	9

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE ALUM.		AVERAGE LENGTH
1	2	3.5'	3" O.D.		9.5'

NO. OF LIGHT FIXTURES		FIXTURE SPACING		WATT	
PHOTOMETRIC CURVE			VOLTAGE		



Panel Style: guide_con_street.ssi
M.U.T.C.D.: 2009 Edition

COPY		4	6	t	h		L
SPACE	3	6.8	5.5	3.4	3.7	25.6	19.4
COPY		S	t		L		
SPACE	25.4	5.3	2.8	14.5	8.1		
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							
COPY							
SPACE							

COPY		L	i	n	e	b	a	u	g	h		L
SPACE	3	5.3	2.2	4.6	4.5	4.4	4.6	4.6	4.8	3.7	30.4	38.6
COPY		A	v	e		L						
SPACE	44.6	6.5	4.7	3.7	12.4	14.9						
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

GUIDE SIGN WORKSHEET

SHEET NO. S-22

STATE OF FLORIDA

CITY OF TAMPA

WALK-BIKE LAP PROJECT

FINANCIAL PROJECT ID 437246-1-58-01

CITY CONTRACT NO. 1001220

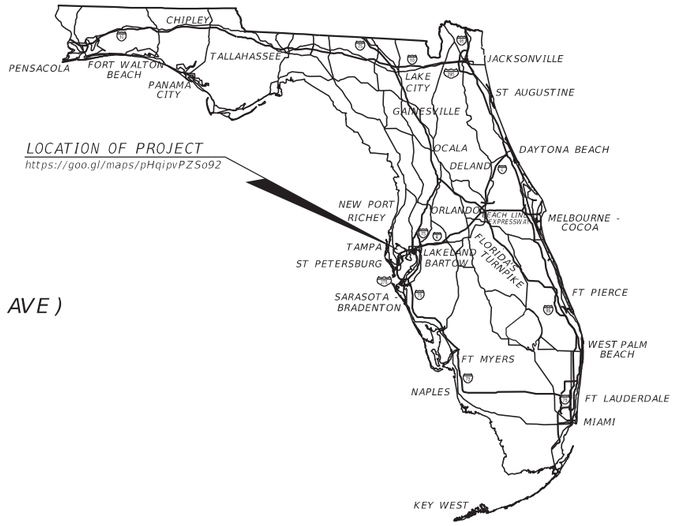
HILLSBOROUGH COUNTY

46TH STREET FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)

SIGNALIZATION PLANS

INDEX OF SIGNALIZATION PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	TABULATION OF QUANTITIES
T-3	GENERAL NOTES
T-4 THRU T-9	SIGNALIZATION PLAN
T-10, T-11	GUIDESIGN WORKSHEET
T-12	SIGN BRACKET ARM - ONE WAY
T-13	SIGN BRACKET ARM - SIGN PANEL DETAIL



MICHAEL J. NOESEN
LICENSE
No 42255
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Michael J Noesen
2020.04.27 11:03:28
-04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED TO BE SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONSTRUCTION PLANS
MARCH, 2020

SIGNALIZATION PLANS ENGINEER OF RECORD:

MICHAEL J. NOESEN, P.E.
P.E. LICENSE NUMBER 42255
BES INC.
11007 N. 56TH ST., SUITE 208
TEMPLE TERRACE, FL 33617
813-985-7800
CERTIFICATE OF AUTHORIZATION 9835

CITY PROJECT MANAGER:

NINA MABILEAU, E.I.

FISCAL YEAR	SHEET NO.
21	T-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

FPID 437246-1-58-01

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS												TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			T-4		T-5		T-6		T-7		T-8		T-9						
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
630-2-11	CONDUIT, F& I, OPEN TRENCH	LF	60												60		60		
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	LF	230												230		230		
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1												1		1		
632-7-6	SIGNAL CABLE, REMOVE - INTERSECTION	PI	1												1		1		
635-2-12	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	EA	14												14		14		
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	3												3		3		
653-1-11	PED. SIGNAL, F&I, LED-COUNTDOWN, 1 WAY	AS	4												4		4		
653-1-60	PED. SIGNAL, REMOVE PED SIGNAL - POLE/PEDESTAL TO REMAIN	AS	2												2		2		
654-2-22	RECTANGULAR RAPID FLASHING BEACON, F&I, SOLAR POWERED, COMPLETE SIGN ASSEMBLY, BACK TO BACK	AS			2		2		2		2		2		10		10		
660-1-103	LOOP DETECTOR, INDUCTIVE, F&I, TYPE 3	EA	4												4		4		
660-2-101	LOOP ASSEMBLY- F&I, TYPE A	AS	4												4		4		
660-2-106	LOOP ASSEMBLY- F&I, TYPE F	AS	4												4		4		
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	EA	4												4		4		
665-1-60	PEDESTRIAN DETECTOR, REMOVE - POLE/PEDESTAL TO REMAIN	EA	2												2		2		
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	AS	1												1		1		
670-5-600	TRAFFIC CONTROLLER ASSEMBLY, REMOVE CONTROLLER WITH CABINET	AS	1												1		1		
700-5-22	INTERNALLY ILLUMINATED SIGN, F&I, OVERHEAD MOUNT, 12-18 SF	EA	4												4		4		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TABULATION OF QUANTITIES

SHEET NO. T-2

SIGNALIZATION NOTES:

1. ONE WEEK PRIOR TO THE START OF THE TRAFFIC SIGNAL INSTALLATION, CONTACT:

   CITY TRAFFIC MANAGEMENT CENTER (TMC) – MR. BRIAN PASZKO
   CITY OF TAMPA
   1104 E TWIGGS ST
   SUITE 200
   TAMPA, FLORIDA 33602
   PHONE: (813)-393-8439
   EMAIL: Brian.Paszko@Tampagov.net

   AND

   TRAFFIC SIGNAL SHOP SUPERVISIOR – MR. SCOTT KEITH
   CITY OF TAMPA
   PHONE: (813)-951-2915
   EMAIL: Scott.Keith@Tampagov.net

2. UNLESS OTHERWISE NOTED, ALL REMOVED EQUIPMENT SHALL BE DISPOSED OF BY THE CONTRACTOR IN AREAS PROVIDED BY HIM.

3. FLASH TIMES FOR EACH RRFB IS CALCULATED BY THE DISTANCE FROM THE DETECTOR TO THE FAR CURB DIVIDED BY 3.5 FT/SEC WALKING SPEED ROUNDED UP TO THE NEAREST SECOND, PLUS 7 SECONDS.

4. W11-02 AND W16-7P SIGNS SHALL BE FLUORESCENT YELLOW GREEN COLOR.

5. CONTACT JAMES COOK WITH PLANNING AND DEVELOPMENT TO VERIFY STREET NAMES AND BLOCK NUMBERS FOR ILLUMINATED STREET NAME SIGNS PRIOR TO ORDERING: (813) 274-7707, James.Cook@tampagov.net

PAY ITEM NOTES:

1. 630-2-11
   TWO SEPARATE UNDERGROUND CONDUIT RUNS LOCATED 180 DEGREES APART ARE REQUIRED FOR MAST ARMS. INSTALL A MINIMUM OF TWO RUNS OF TWO INCH CONDUIT BETWEEN THE LAST LOW VOLTAGE (LOOPS) PULL BOX LOCATED NEAR THE CONTROLLER CABINET AND THE CONTROLLER CABINET.

2. 632-7-1:
   WIRE EACH PHASE/MOVEMENT FROM THE SIGNAL DISPLAY TO THE CONTROLLER AS A SEPARATE PHASE/MOVEMENT. THIS INCLUDES THE LEFT TURN MOVEMENT WHICH HAVE CONDUCTORS AVAILABLE FOR EITHER PROTECTED OR PERMISSIVE MOVEMENTS. VERIFY COLOR CODES FOR SIGNAL CABLE AND INTERCONNECT CABLE WITH THE CITY OF TAMPA TRAFFIC SIGNAL SUPERVISOR BEFORE ORDERING, AND WIRE THE SIGNAL IN ACCORDANCE WITH THAT COLOR CODE AND F.D.O.T. SPECIFICATIONS. INSTALL ONE NEUTRAL PER APPROACH. ALL FIELD WIRING MUST BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT, LEGIBLE, WEATHER PROOF TAGS SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM SHALL BE SUBMITTED FOR APPROVAL WITH THE OTHER EQUIPMENT SUBMITTALS.

3. 635-2-12: PULL BOXES SHALL BE 17" X 30". ANY PULL BOXES THAT REMAIN AFTER THE CONSTRUCTION OF THE PROJECT BUT NO LONGER NEEDED FOR THE TRAFFIC OPERATION ARE TO BE REMOVED AND FILLED IN WITH CONCRETE OR REPLACEMENT OF SIDEWALK PANEL. SIGNALIZATION PULL BOXES AND COVERS MUST INCLUDE THE RAISED LOGO "TRAFFIC SIGNAL".

4. 654-2-22: RRFB'S MUST BE ACCEPTABLE TO THE CITY. RRFB PEDESTRIAN BUTTONS MUST HAVE A TACTILE ARROW WITH NO LED, CHIRP OR LATCHING CAPABILITIES. RRFB'S MUST HAVE SUPPORT COLLARS WITH ROLL PINS. SIDE CAPS MOUNTED ON THE EDGES OF THE FLASHER HOUSING ARE TO BE REMOVED.

5. 665-1-12:
   COORDINATE WITH THE CITY OF TAMPA SIGNAL SHOP FOR ACCEPTABLE CHOICES OF PEDESTRIAN DETECTORS AND OPERATIONS. PIEZO STYLE LATCHING PUSH BUTTON SHALL INCLUDE VISUAL INDICATION OF ACTUATION AND SHALL REMAIN ILLUMINATED UNTIL THE PEDESTRIAN WALK INDICATION IS DISPLAYED. DIRECTION SPECIFIC PUSH BUTTON SHALL HAVE A TACTILE ARROW. APPROPRIATE BUTTONS MUST HAVE LEFT OR RIGHT ARROWS AND MUST BE ALIGNED WITH AND POINTING AT THE DESIGNATED PEDESTRIAN RAMP. THE BUTTON MUST BE MOUNTED SO SPEAKER IS FACING DOWN. INCIDENTAL EQUIPMENT MAY BE REQUIRED FOR PROPER OPERATION.

6. 670-5-110:
   NOTIFY THE CITY OF TAMPA SIGNAL SHOP AND FDOT DISTRICT SEVEN TRAFFIC OPERATIONS AT LEAST 48 HOURS IN ADVANCE OF TURNING ON A NEW OR MODIFIED CONTROLLER CABINET ASSEMBLY.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

GENERAL NOTES

SHEET NO.
T-3

(A)	E Bougainvillea Ave 4500	(D)	N 46th St 10400 10500
(B)	E Serena Dr 4600	(E)	E Bougainvillea 4500 Ave
(C)	N 46th St 10500 10400	(F)	E Serena Dr 4600

N

0 5 20

Feet

P6 P8 P4

PED. SIGNAL COUNT-DOWN 1-SECT., 1-WAY

4 AS 653-1-11

6' X 30' TYPE F LOOP (TYP.) 660-2-106 1 AS

6' X 30' TYPE A LOOP (TYP.) 660-2-101 1 AS

R/W LINE

L-8D

L-8D

E BOUGANVILLEA AVE

EXIST. PEDESTRIAN SIGNAL TO REMAIN

EXIST. CONTROLLER TO BE REMOVED.

EXIST. PEDESTRIAN SIGNAL TO REMAIN

TRAFFIC CONTROLLER STA 50+98, 32' LT

630-2-11	10 LF (4 RUNS)
635-2-12	5 EA
660-1-103	4 EA
670-5-110	1 AS
670-5-600	1 AS

700-5-22 4 EA

632-7-1 1 PI

632-7-6 1 PI

REMOVE 2 EXIST. PULLBOXES

EXIST. PEDESTRIAN SIGNAL TO REMAIN

630-2-11 20 LF (4 RUNS)

R/W LINE

6' X 30' TYPE A LOOP (TYP.) 660-2-101 1 AS

℄ SURVEY N 46TH ST

49

50

51

N 0° 13' 06" E

N 46TH ST

L-6D

L-2D

L-2D

5 RUNS
1 HV
1 HV SPARE
2 LV
1 LV SPARE

230 LF 630-2-12

9 EA 635-2-12

3' TYPICAL

6' X 30' TYPE F LOOP (TYP.) 660-2-106 1 AS

6' X 30' TYPE F LOOP (TYP.) 660-2-106 1 AS

L-6D

R/W LINE

6' X 30' TYPE A LOOP (TYP.) 660-2-101 1 AS

REMOVE EXIST. PEDESTRIAN SIGNAL

R/W LINE

PEDESTRIAN SIGNAL & DETECTOR, STA 49+57, 31' RT

630-2-11	10 LF (4 RUNS)
646-1-11	2 EA
665-1-12	2 EA

PEDESTRIAN SIGNAL & DETECTOR, STA 49+68, 35.0' RT

PEDESTRIAN SIGNAL & DETECTORS, STA 50+42, 31' RT & 50+31, 43' RT

630-2-11	20 LF (4 RUNS)
646-1-11	2 EA
665-1-12	2 EA

EXIST. PEDESTRIAN SIGNALS, DETECTORS AND CONDUIT TO BE REMOVED FROM TECO POLE.

653-1-60	2 AS
665-1-60	2 EA

REMOVE 2 EXIST. PULLBOXES

L-4D

E SERENA DR

L-4D

6' X 30' TYPE F LOOP (TYP.) 660-2-106 1 AS

6' X 30' TYPE A LOOP (TYP.) 660-2-101 1 AS

R/W LINE

35 MPH

35 MPH

40 MPH

30 MPH

S.O.P

PHASE 1

PHASE 2

CONTROLLER OPERATIONS:

1. MAJOR STREET IS 46TH STREET (MOVEMENTS 2 AND 6), MINOR STREET BOUGANVILLEA AVE/SERENA DR.
2. INTERNALLY ILLUMINATED SIGNS ARE TO BE L.E.D. TYPE BACK TO BACK.

DETECTORS FOR LOOPS

LOOP	NO. OF LOOPS	NO. OF NEW DETS.	NO. OF EXIST. DETS.	DELAY TIME (SEC)
L-2D	2	1	1	5
L-4D	2	1	1	5
L-6D	2	1	1	5
L-8D	2	1	1	5

CONTROLLER TIMINGS

	TIMING FUNCTION	1		2			
	MOVEMENT NO.	2	6	4	8		
TIMING FUNCTION	YELLOW CLR.	4.4	4.0	3.7	4.0		
	ALL RED CLR.	2.0	2.0	2.0	2.0		
	PED. WALK	7.0	7.0	7.0	7.0		
	PED. CLR.	13.0	11.0	14.0	11.0		

NOTE: EXISTING TIMINGS ARE TO REMAIN EXCEPT AS NOTED ABOVE

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

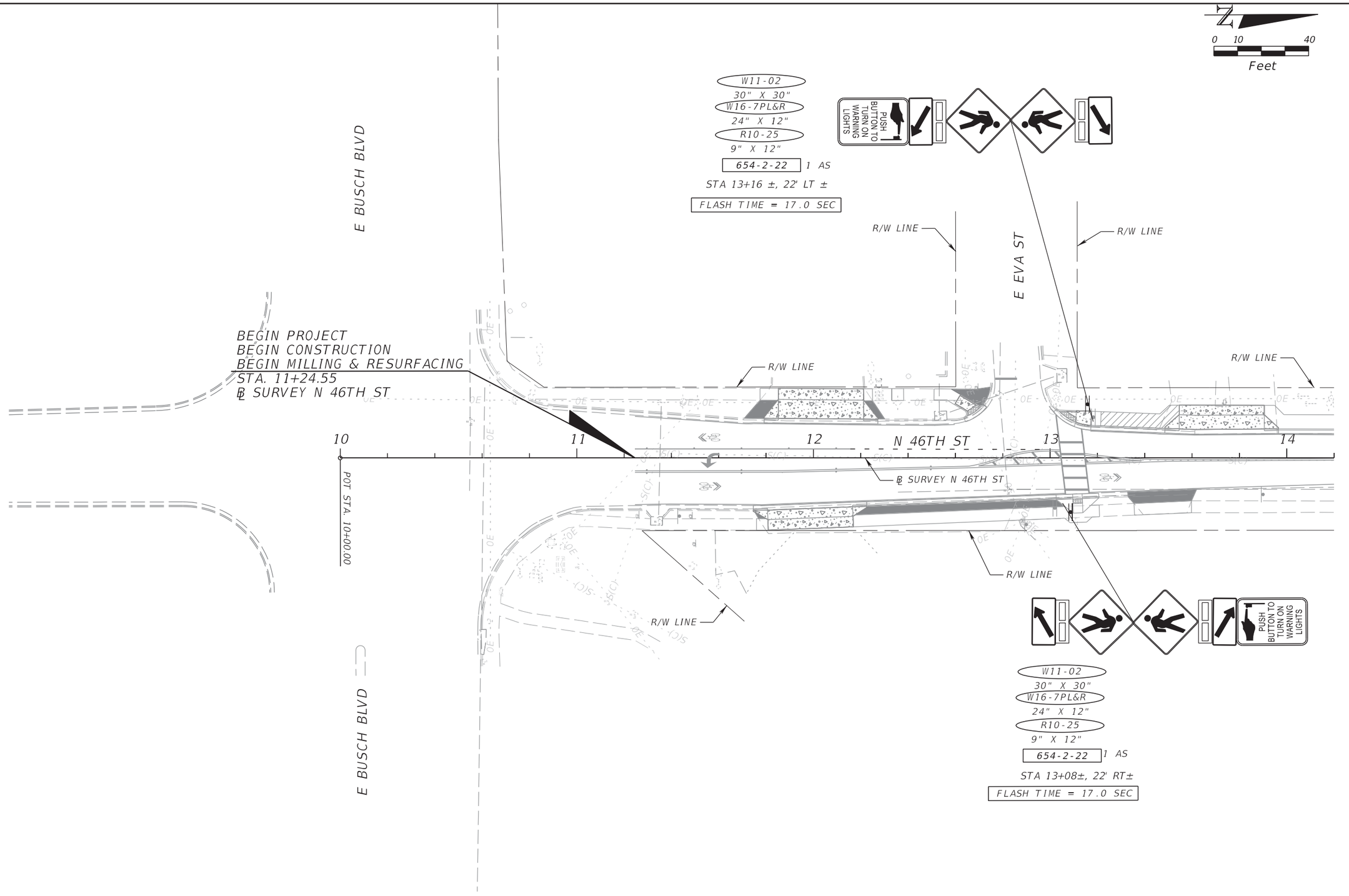
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNALIZATION PLAN

SHEET NO. T-4

brenda 3/17/2020 10:42:02 AM N:\Projects\0269 46th St_Busch to Fowler\43724615801_BES\signals\PLANSG04.dgn



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

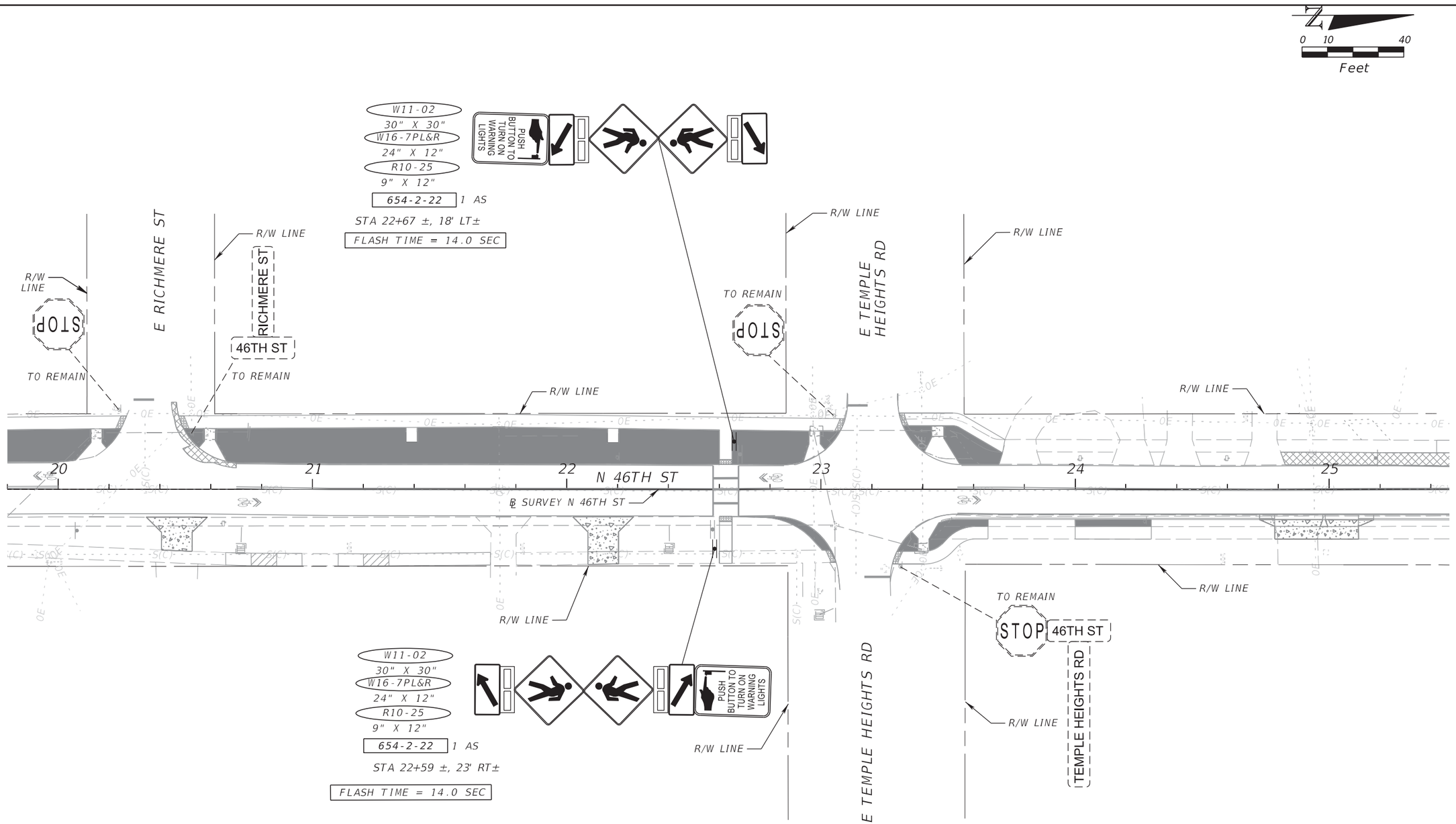
BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

RRFB PLAN (1)
EAST EVA STREET

SHEET NO. T-5



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

RRFB (2)
EAST TEMPLE HEIGHTS RD

SHEET NO. T-6

0 10 40
Feet

W11-02
30" X 30"
W16-7PL&R
24" X 12"
R10-25
9" X 12"
654-2-22 1 AS
STA 31+82 ±, 15' LT±
FLASH TIME = 16.0 SEC

E 98TH AVE
E 99TH AVE
E LINEBAUGH AVE
R/W LINE
N 46TH ST
℄ SURVEY N 46TH ST
1
32
33
34
35
36
104
105
106

W11-02
30" X 30"
W16-7PL&R
24" X 12"
R10-25
9" X 12"
654-2-22 1 AS
STA 31+75 ±, 20' RT±
FLASH TIME = 16.0 SEC

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

RRFB(3)
E 98TH AVE

SHEET NO.
T-7

brenda 3/17/2020 10:42:04 AM N:\Projects\0269 46th St_Busch to Fowler\43724615801_BES\signals\PLANSG07.dgn

0 10 40
Feet

W11-02
30" X 30"
W16-7PL&R
24" X 12"
R10-25
9" X 12"
654-2-22 1 AS
STA 62+97 ±, 22' LT±
FLASH TIME = 20.0 SEC

PUSH BUTTON TO TURN ON WARNING LIGHTS

59 60 61 62 63 64

N 46TH ST

℄ SURVEY N 46TH ST

R/W LINE

PARK 46 APARTMENTS

PUSH BUTTON TO TURN ON WARNING LIGHTS

W11-02
30" X 30"
W16-7PL&R
24" X 12"
R10-25
9" X 12"
654-2-22 1 AS
STA 62+89 ±, 35' RT±
FLASH TIME = 20.0 SEC

R/W LINE

E WHITEWAY DR

R/W LINE

R/W LINE

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

RRFB PLAN (4)
EAST WHITEWAY DRIVE

SHEET NO. T-8

0 10 40
Feet

W11-02
30" X 30"
W16-7PL&R
24" X 12"
R10-25
9" X 12"
654-2-22 1 AS
STA 79+26 ±, 20' LT±
FLASH TIME = 17.0 SEC

PUSH BUTTON TO TURN ON WARNING LIGHTS

TO REMAIN

STOP

R/W LINE

76 77 78 79 80 81

℄ SURVEY N 46TH ST

N 46TH ST

R/W LINE

W11-02
30" X 30"
W16-7PL&R
24" X 12"
R10-25
9" X 12"
654-2-22 1 AS
STA 79+18 ±, 23' RT±
FLASH TIME = 17.0 SEC

PUSH BUTTON TO TURN ON WARNING LIGHTS

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

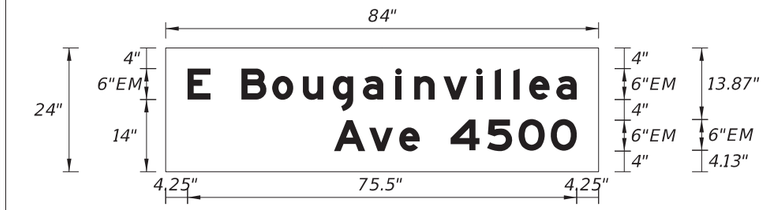
RRFB PLAN (5)
THE RETREAT APARTMENTS

SHEET NO. T-9

SIGN NAME	A		QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER				none
WIDTH	7'-0"	WIDTH	0"			
HEIGHT	2'-0"	RADII	0"			
LEGEND	White	COLOR	Green			
COLOR	Green					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Land	COLUMN SIZE		AVERAGE LENGTH



NO. OF LIGHT FIXTURES | FIXTURE SPACING | PHOTOMETRIC CURVE | WATT | VOLTAGE

COPY		E		B	o	u	g	a	i	n	v	i	l	l	e	a		L						
SPACE	4.2	4.4	6	6	5.9	5.8	5.8	6.4	3.6	5.7	6.4	3.6	3.6	3.1	5.3	4	4.2	75.5						
COPY		A	v	e		L																		
SPACE	32.6	6.8	5.8	4	34.7	16.6																		
COPY		4	5	0	0		L																	
SPACE	55.3	7.1	6.1	6.2	5	4.2	24.5																	
COPY																								
SPACE																								
COPY																								
SPACE																								
COPY																								
SPACE																								

SIGN NAME	B		QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER				none
WIDTH	7'-6"	WIDTH	0"			
HEIGHT	2'-0"	RADII	0"			
LEGEND	White	COLOR	Black			
COLOR	Green					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Land	COLUMN SIZE		AVERAGE LENGTH

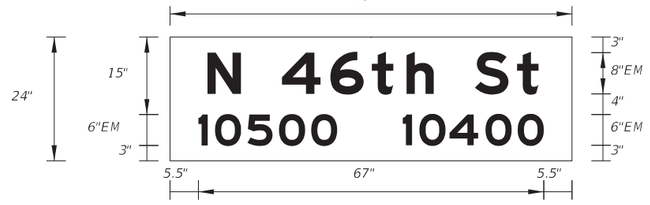
NO. OF LIGHT FIXTURES | FIXTURE SPACING | PHOTOMETRIC CURVE | WATT | VOLTAGE

COPY		E		S	e	r	e	n	a		D	r		L										
SPACE	6.6	5.9	8	8.2	7.8	5.2	7.8	7.8	5.3	8	8.9	4	6.6	76.8										
COPY		4	6	0	0		L																	
SPACE	55	7	6.1	6.2	5	10.7	24.4																	
COPY																								
SPACE																								
COPY																								
SPACE																								
COPY																								
SPACE																								
COPY																								
SPACE																								

SIGN NAME	C		QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER				none
WIDTH	6'-6"	WIDTH	0"			
HEIGHT	2'-0"	RADII	0"			
LEGEND	White	COLOR				
COLOR	Green					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Land	COLUMN SIZE		AVERAGE LENGTH



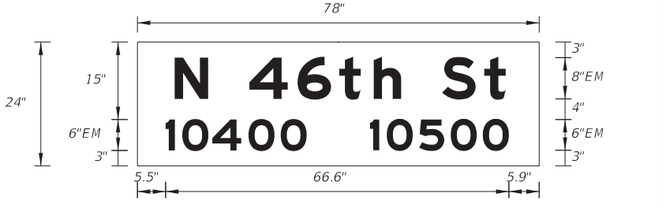
NO. OF LIGHT FIXTURES | FIXTURE SPACING | PHOTOMETRIC CURVE | WATT | VOLTAGE

COPY		N		4	6	t	h		S	t		L												
SPACE	7.3	6.5	8	9.4	8.1	6.7	5.3	8	8.2	4.2	6.5	64.2												
COPY		1	0	5	0	0		L																
SPACE	5.5	3.2	6.3	6.1	6.2	5	45.6	26.9																
COPY		1	0	4	0	0		L																
SPACE	45.2	3.2	5.8	7	6.2	5	5.5	27.4																
COPY																								
SPACE																								
COPY																								
SPACE																								
COPY																								
SPACE																								

SIGN NAME	D		QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER				none
WIDTH	6'-6"	WIDTH	0"			
HEIGHT	2'-0"	RADII	0"			
LEGEND	White	COLOR				
COLOR	Green					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Land	COLUMN SIZE		AVERAGE LENGTH



NO. OF LIGHT FIXTURES | FIXTURE SPACING | PHOTOMETRIC CURVE | WATT | VOLTAGE

COPY		N		4	6	t	h		S	t		L												
SPACE	7.3	6.5	8	9.4	8.1	6.7	5.3	8	8.2	4.2	6.5	64.2												
COPY		1	0	4	0	0		L																
SPACE	5.5	3.2	5.8	7	6.2	5	45.2	27.4																
COPY		1	0	5	0	0		L																
SPACE	45.2	3.2	6.3	6.1	6.2	5	5.9	26.9																
COPY																								
SPACE																								
COPY																								
SPACE																								
COPY																								
SPACE																								

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

GUIDESIGN WORKSHEET (1)

SHEET NO. T-10

SIGN NAME	E	QTY	/	SIGN NUMBER	STATION(S)
PANEL		BORDER			none
WIDTH	7'-0"	WIDTH	0"		
HEIGHT	2'-0"	RADII	0"		
LEGEND	White	COLOR			
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH

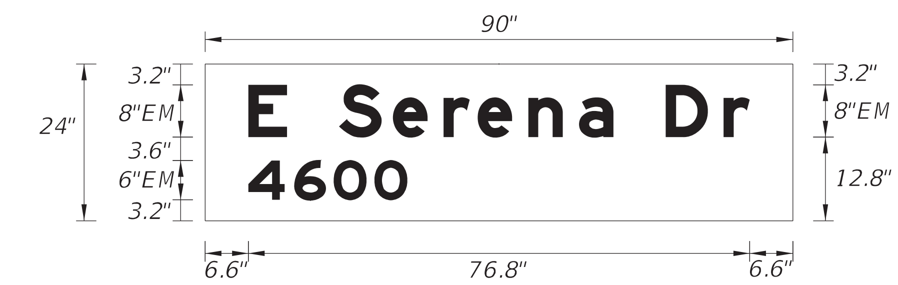
NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY		E		B	o	u	g	a	i	n	v	i	l	l	e	a		L
SPACE	4.2	4.4	6	6	5.9	5.8	5.8	6.4	3.6	5.7	6.4	3.6	3.6	3.1	5.3	4	4.2	75.5
COPY		4	5	0	0		L											
SPACE	4.2	7.1	6.1	6.2	5	55.3	24.5											
COPY		A	v	e		L												
SPACE	34.9	6.8	5.8	4	32.4	16.6												
COPY																		
SPACE																		
COPY																		
SPACE																		
COPY																		
SPACE																		

SIGN NAME	F	QTY	/	SIGN NUMBER	STATION(S)
PANEL		BORDER			none
WIDTH	7'-6"	WIDTH	0"		
HEIGHT	2'-0"	RADII	0"		
LEGEND	White	COLOR			
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH



NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY		E		S	e	r	e	n	a		D	r		L
SPACE	6.6	5.9	8	8.2	7.8	5.2	7.8	7.8	5.3	8	8.9	4	6.6	76.8
COPY		4	6	0	0		L							
SPACE	6.6	7	6.1	6.2	5	59	24.4							
COPY														
SPACE														
COPY														
SPACE														
COPY														
SPACE														
COPY														
SPACE														

SIGN NAME		QTY		SIGN NUMBER	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	

SIGN NAME		QTY		SIGN NUMBER	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

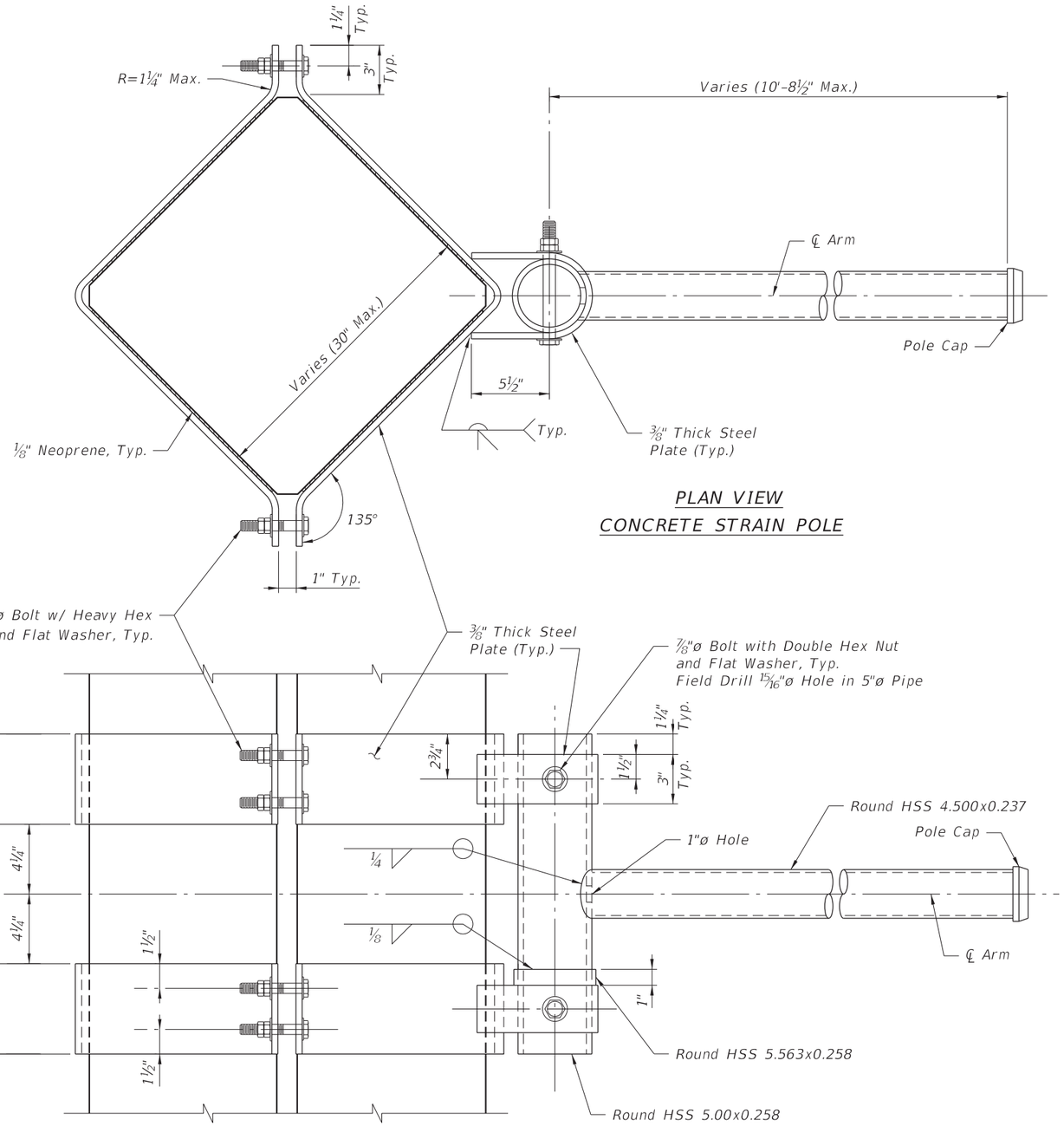
BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

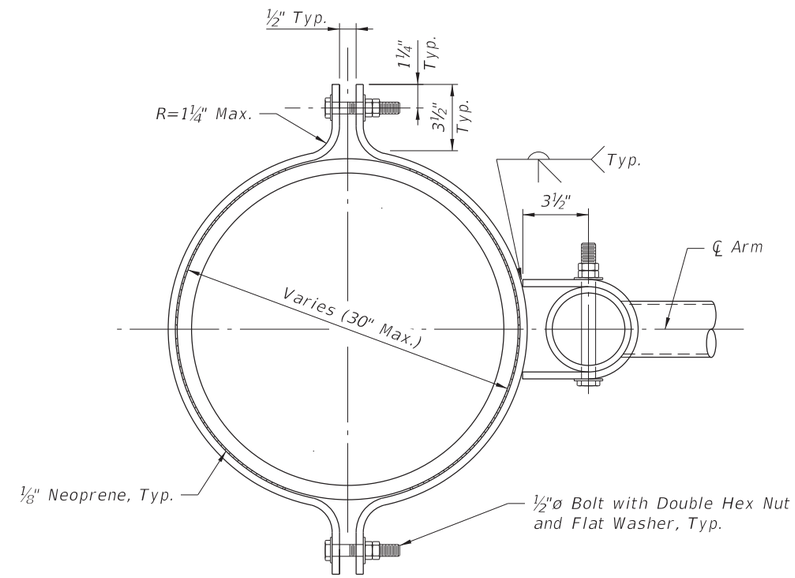
GUIDESIGN WORKSHEET (2)

SHEET NO. T-11



PLAN VIEW
CONCRETE STRAIN POLE

ELEVATION VIEW
CONCRETE STRAIN POLE
Round Steel Pole Similar



PLAN VIEW
ROUND STEEL POLE

NOTES:

1. The Contractor shall verify the pole and dimensions required for installation of the Sign Bracket Arm and mounting angle before manufacturing Sign Bracket Arm.

2. Work this sheet with Sign Bracket Arm – Sign Panel Details sheet for additional installation details.

3. DESIGN WIND SPEED = 130 MPH
   Design Loads from the center of the vertical pipe are as follows:
   Horizontal Moment = 7581 FT LBS Vertical Moment = 1247 FT LBS
   Horizontal Shear = 1338 LBS Vertical Shear = 226 LBS

4. The Contractor may propose an alternative Sign Bracket Arm design at no additional cost to the Department. The Contractor's alternative shall be designed in accordance with the latest edition of the FDOT Plans Preparation Manual and AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals.

5. If an alternate design is proposed the Contractor shall submit design calculations and shop drawings signed and sealed by a Professional Engineer Registered in the State of Florida.

6. All Structural Steel except for Structural Tubing shall conform to ASTM A572 Grade 50. Structural Tubing shall conform to ASTM A53 Grade B. All bracket plates shall be hot bent.

7. All Bolts shall be High Strength A325 Bolts and shall receive Electrodeposited Coating in accordance with ASTM B633.

8. The Complete Sign Bracket Arm Assembly shall be hot-dipped Galvanized in accordance with ASTM A123.

9. WELDING: All Welding shall be in accordance with American Welding Society Structural Welding Code (Steel), ANSI/AWS D1.1 (current edition). Required weld material is E70XX. Nondestructive testing is not required.

10. Field Welding shall not be permitted.

11. All materials and labor required to furnish and install the Complete Sign Bracket Arm Assembly shall be included in Pay Item No. 700-5-AB or 700-3-ABB.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

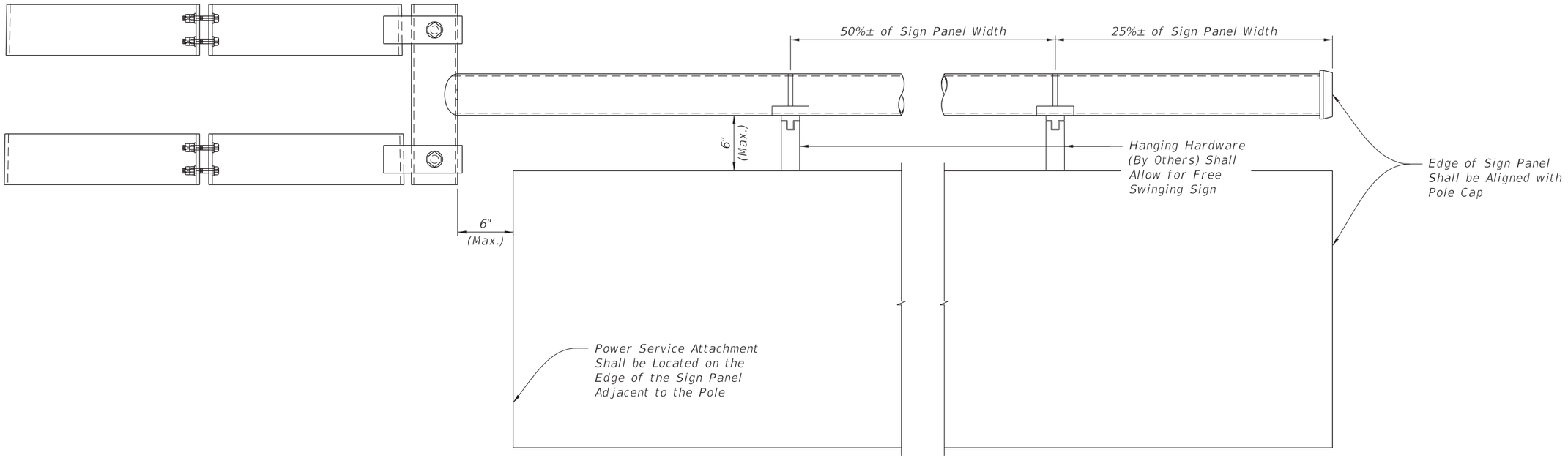
BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGN BRACKET ARM
ONE WAY

SHEET NO. T-12



INTERNALLY ILLUMINATED SIGN PANEL DETAIL

NOTES:
1. Sign panels shall be Level after installation.
2. Internally illuminated panels shall be two sided.
3. Aluminum signs shall be two panels mounted back to back with hangers sandwiched between.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BES INC.
11007 N. 56TH ST., #208
TEMPLE TERRACE, FL 33617
(813) 985-7800
CERTIFICATE OF AUTHORIZATION NO. 9835
MICHAEL J. NOESEN
LICENSE NO. 42255

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGN BRACKET ARM SIGN PANEL DETAIL

SHEET NO.
T-13

INDEX OF LANDSCAPE PLANS

SHEET NO.	SHEET DESCRIPTION
L1	COVER SHEET
L2	PLANTING PLAN 10
L3	PLANTING PLAN 11
L4	PLANTING PLAN 12
L5	PLANTING PLAN 13
L6	PLANTING PLAN 14
L7	PLANTING PLAN 15
L8	IRRIGATION PLAN 10
L9	IRRIGATION PLAN 11
L10	IRRIGATION PLAN 12
L11	IRRIGATION PLAN 13
L12	IRRIGATION PLAN 14
L13	IRRIGATION PLAN 15
L14	GENERAL NOTES 1
L15	LANDSCAPE NOTES 1
L16	LANDSCAPE NOTES 2
L17	LANDSCAPE TABULATIONS
L18	IRRIGATION TABULATIONS
L19	PLANTING DETAILS 1
L20	PLANTING DETAILS 2
L21	LANDSCAPE MAINTENANCE NOTES
L22	IRRIGATION LEGEND
L23	IRRIGATION DETAILS 1
L24	IRRIGATION DETAILS 2
L25	IRRIGATION DETAILS 3
L26	IRRIGATION DETAILS 4
L27	TECHNICAL MAINTENANCE PLAN

STATE OF FLORIDA

CITY OF TAMPA

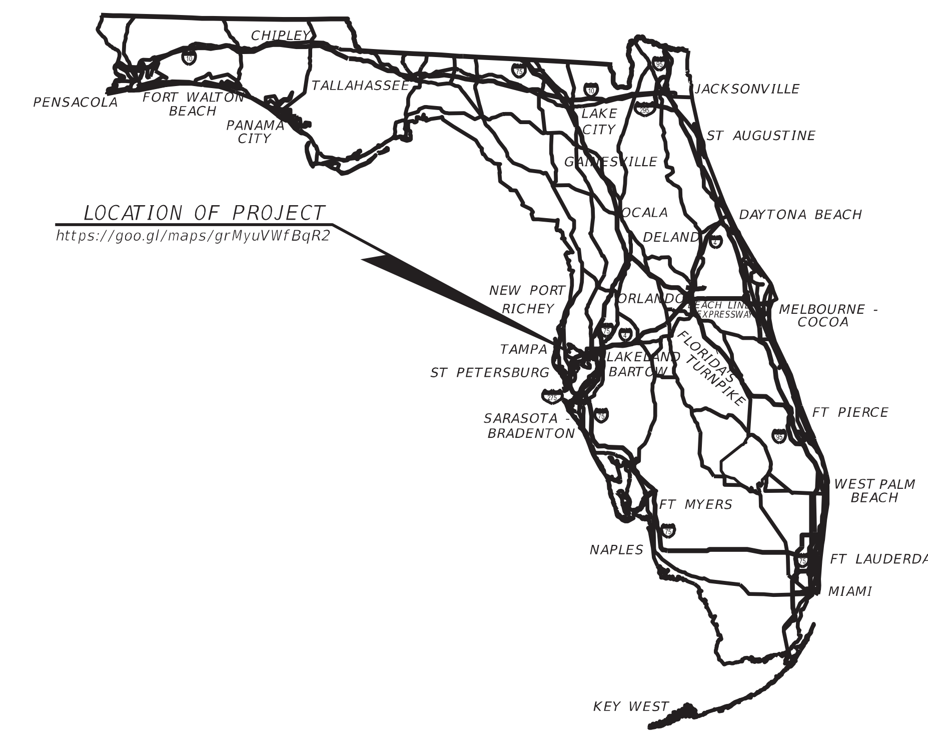
WALK-BIKE LAP PROJECT
LANDSCAPE PLANS

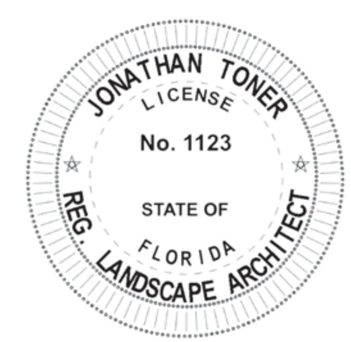
FINANCIAL PROJECT ID 437246-1-58-01

CITY PROJECT NO. 1001220

HILLSBOROUGH COUNTY

46TH STREET FROM SR 580 (E BUSCH BLVD) TO SR 582 (E FOWLER AVE)





THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Jonathan H Toner
2020.04.24 12:54:01 -04'00'

ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CONSTRUCTION PLANS
MARCH 2020

LANDSCAPE PLANS
LANDSCAPE ARCHITECT OF RECORD:

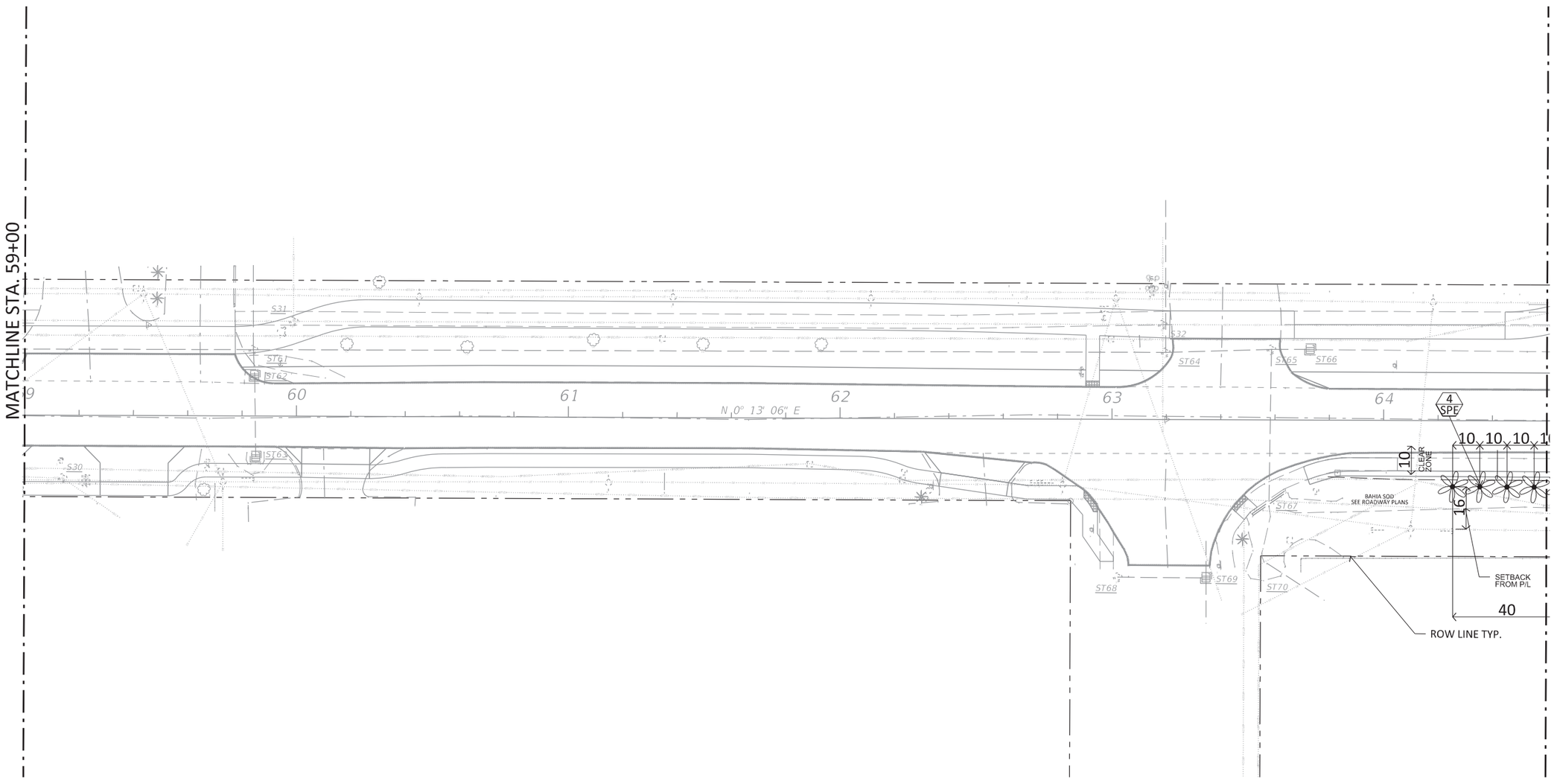
JONATHAN H. TONER, RLA
LIC# FL0001123
TERRA TECTONICS DESIGN GROUP, INC.
1188 KAPP DRIVE
CLEARWATER, FLORIDA 33765
CERTIFICATE OF AUTHORIZATION: #254

PROJECT MANAGER:

NINA MABILLEAU, E.I.

CITY OF TAMPA TRANSPORTATION AND STORMWATER SERVICES

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.

Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254

Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

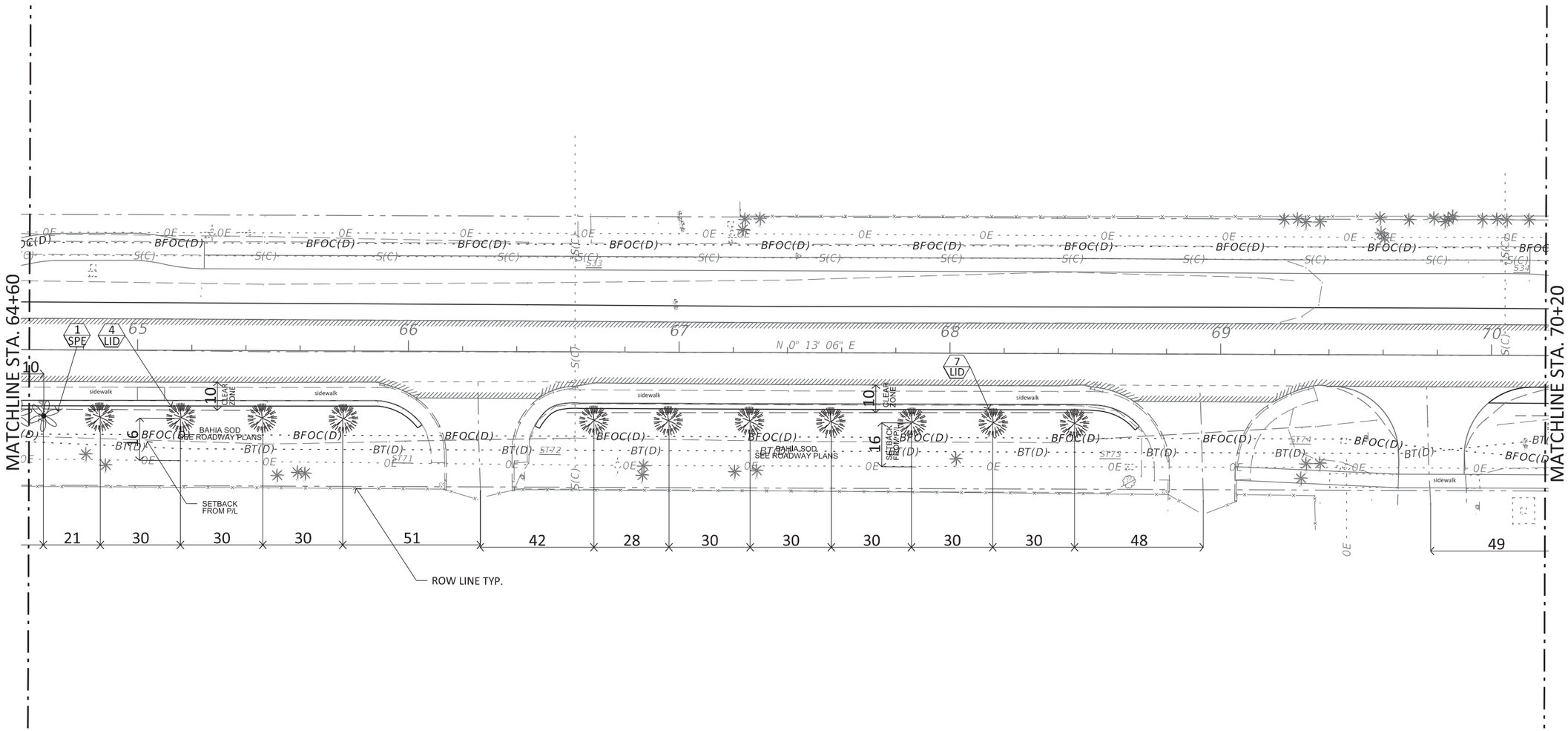
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PLANTING PLAN 10

SHEET NO.

L2



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

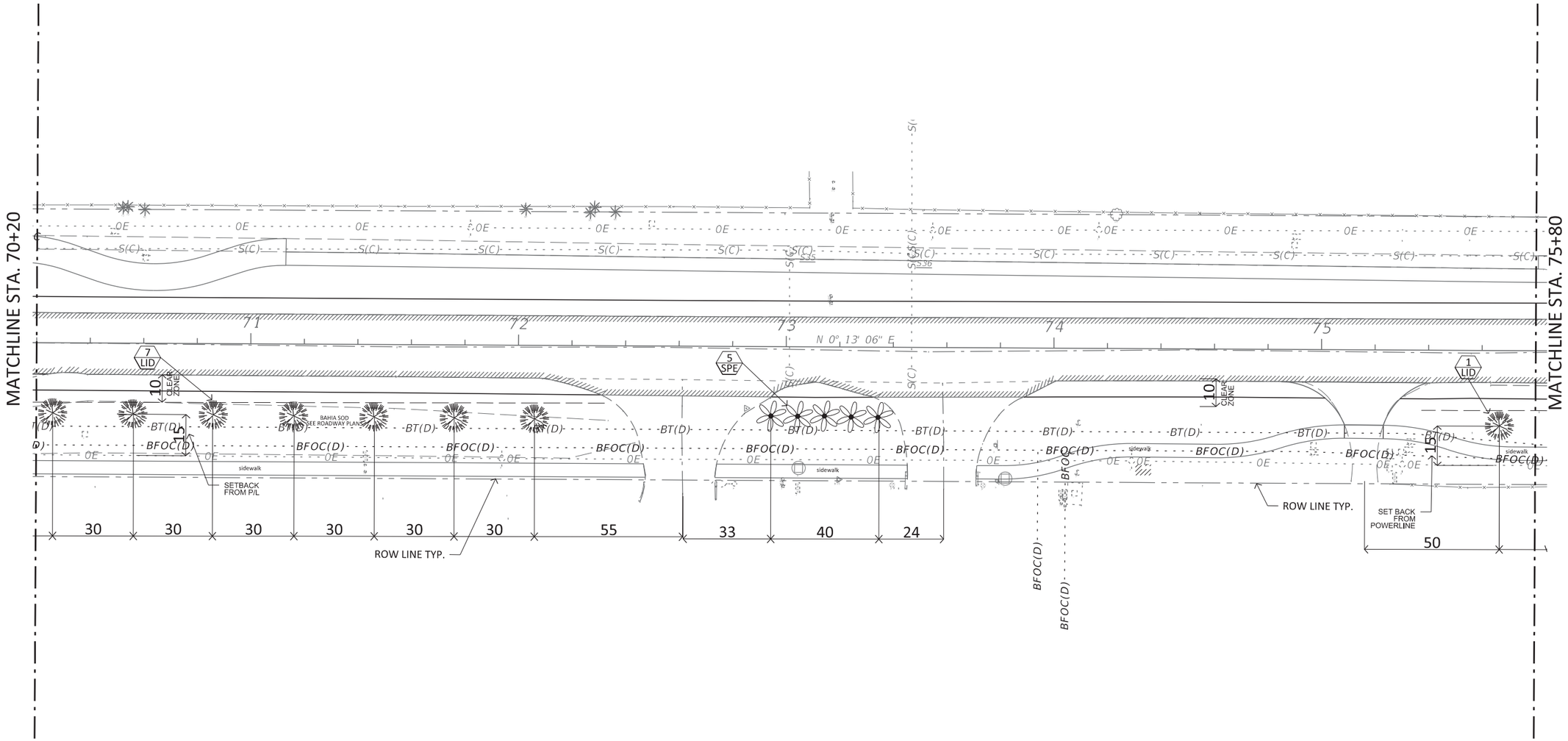
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PLANTING PLAN 11

SHEET NO. L3

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

$USER$ 4/23/2020 4:26:17 PM $MODELNAME$ J:\18\18-861_WO Walk-Bike FDOT LAP Projects w_Ayres\dgn\43724615801_051519_46TH\landscp\dsgnldo1.dgn



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PLANTING PLAN 12

SHEET NO. L4

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

MATCHLINE STA. 75+80

MATCHLINE STA. 81+40

BFOC(D)

S(C)

0E

S37

S38

S39

S40

BT(D)

BFOC(D)

sidewalk

BAHIA SOD
SEE ROADWAY PLANS

76 77 78 79 80 81

N 0° 13' 06" E

10' CLEAR ZONE

3 LID

5 SPE

3 LID

10 CLEAR ZONE

15 SET BACK FROM POWERLINE

2 LID

12

10 CLEARZONE

5 LID

BAHIA SOD
SEE ROADWAY PLANS

2 SPE

20 SS

9 SS

15

SET BACK FROM POWERLINE

ROW LINE TYP.

38

35 28 26 63 10 10 10 10 17 30 30 60 46 44 30 30 30 30 23 10 1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.

Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254

Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

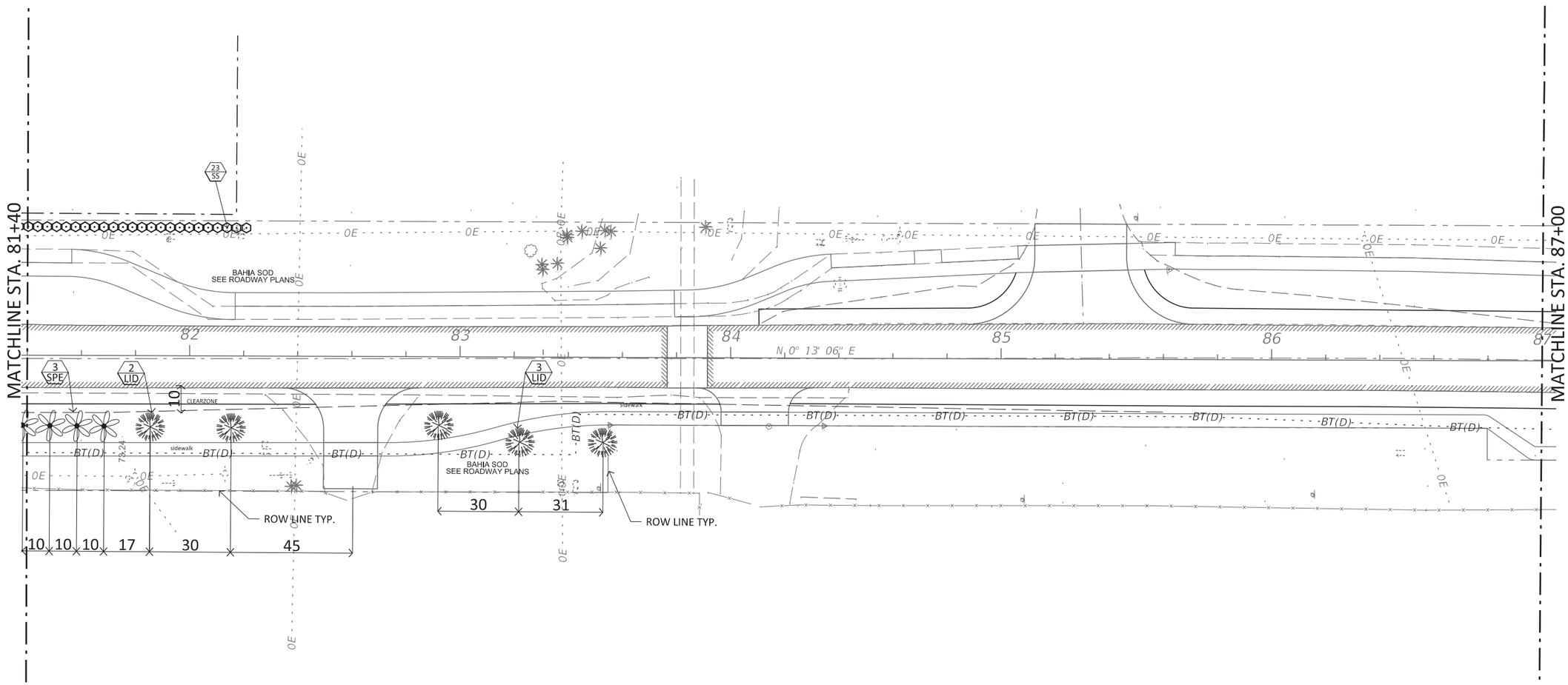
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PLANTING PLAN 13

SHEET NO. L5



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.

Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254

Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

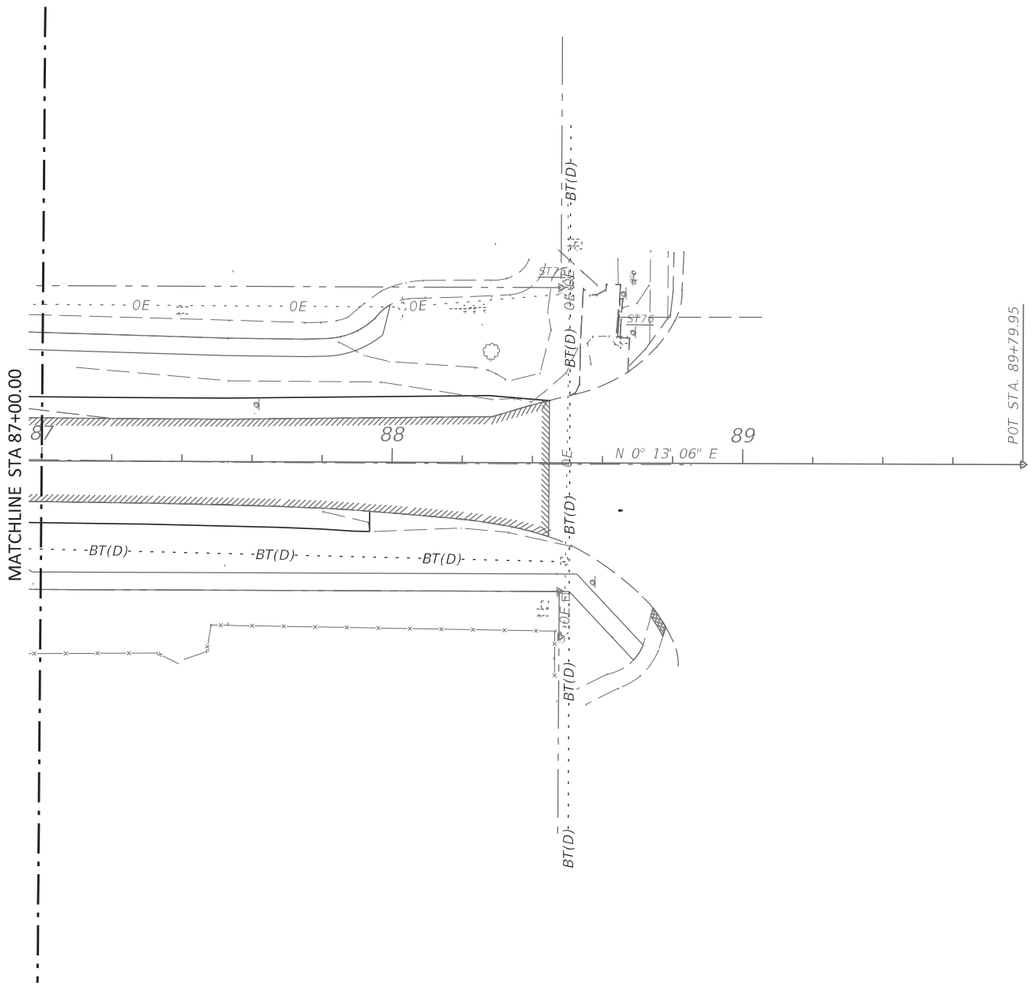
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PLANTING PLAN 14

SHEET NO. L6



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PLANTING PLAN 15

SHEET NO. L7

$USER$ 4/23/2020 4:26:19 PM $MODELNAME$ J:\18\18-861_WO Walk-Bike FDOT LAP Projects w_Ayres\dgn\437246158O1_051519_46TH\landscp\dsgnldo1.dgn

MATCHLINE STA. 59+00

MATCHLINE STA. 64+60

N 0° 13' 06" E

59 60 61 62 63 64

BT(D) BFOC(D) S(C) OE

ST61 ST62 ST63 ST64 ST65 ST66 ST67 ST68 ST69 ST70

S30 S31 S32

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

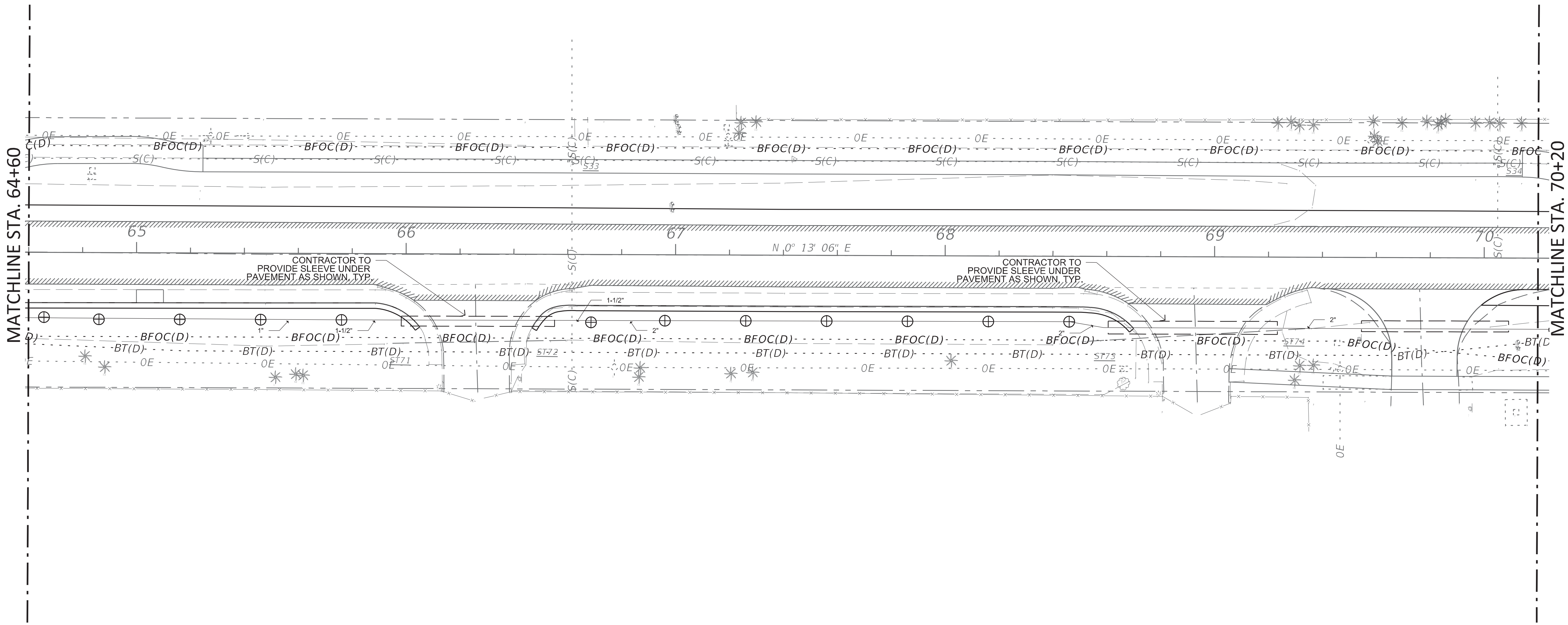
TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION PLAN 10

SHEET NO. L8



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION PLAN 11

SHEET NO. L9

MATCHLINE STA. 70+20

MATCHLINE STA. 75+80

71 72 73 74 75

N 0° 13' 06" E

CONTRACTOR TO PROVIDE SLEEVE UNDER PAVEMENT AS SHOWN, TYP.

CONTRACTOR TO PROVIDE SLEEVE UNDER PAVEMENT AS SHOWN, TYP.

LOCATION OF TECO POWER POLE. COORDINATE WITH TECO TO INSTALL METER AT THIS LOCATION FOR IRRIGATION CONTROLLER. BREAKER SHALL BE CAPABLE OF 120V 1 PHASE 20AMP SERVICE. INSTALL UNDERGROUND CABLE FROM METER TO CONTROLLER. IN 1" CONDUIT. SEE SPECIFICATIONS FOR METER BILL ASSIGNMENT INFORMATION.

2-1/2" PVC SCH 40 IRRIGATION MAIN WITH LOCATOR SENSOR TAPE IN SAME TRENCH, TYP.

A
1-1/2" | 28.0 GPM

INSTALL IRRIGATION CONTROL VALVE IN LOCATION AS SHOWN WITH CONCRETE VALVE BOX AND CAST IRON LID. TYP.

B
1-1/2" | 30.0 GPM

INSTALL IRRIGATION CONTROL VALVE IN LOCATION AS SHOWN WITH CONCRETE VALVE BOX AND CAST IRON LID. TYP.

BF
WATER

INSTALL MIR/irrinet M CONTROLLER TO THIS LOCATION. CONTRACTOR TO BE RESPONSIBLE FOR CONNECTION TO A/C POWER SUPPLY USING 1" CONDUIT FROM CONTROLLER TO POWER DROP BREAKER PANEL AT POWER POLE SHOWN. COORDINATE WITH TECO TO INSTALL POWER DROP AND BREAKER PANEL. COORDINATE INSTALLATION WITH CITY OF TAMPA -PARKS IRRIGATION SPECIALIST - MARK NEUBERGER (813)478-5280. COT-PARKS WILL NEED TO LINK TO THEIR CENTRAL CONTROL SYSTEM BEFORE CONTROLLER IS OPERATIONAL. THIS NEEDS TO BE PERFORMED BEFORE PLANTINGS ARE INSTALLED.

WATER SOURCE SHALL BE POTABLE WATER CONTRACTOR TO PROVIDE A 1-1/2" TAP AND WATER METER INTO EXISTING 8" MAIN AND INSTALLATION OF CITY OF TAMPA WATER METER. COORDINATE WITH CITY OF TAMPA WATER DEPARTMENT. CONTRACTOR TO PROVIDE ALL EQUIPMENT DOWNSTREAM OF TAP INCLUDING 2" BALL VALVE SHUT OFF, BACKFLOW PREVENTOR AND MASTER IRRIGATION VALVE WITH FLOW SENSOR. INSTALL ALL VALVES IN CONCRETE VALVE BOXES WITH CAST IRON LIDS, TYP. METER SHALL BE CAPABLE OF PRODUCING A MIN OF 35GPM AT 50 PSI

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

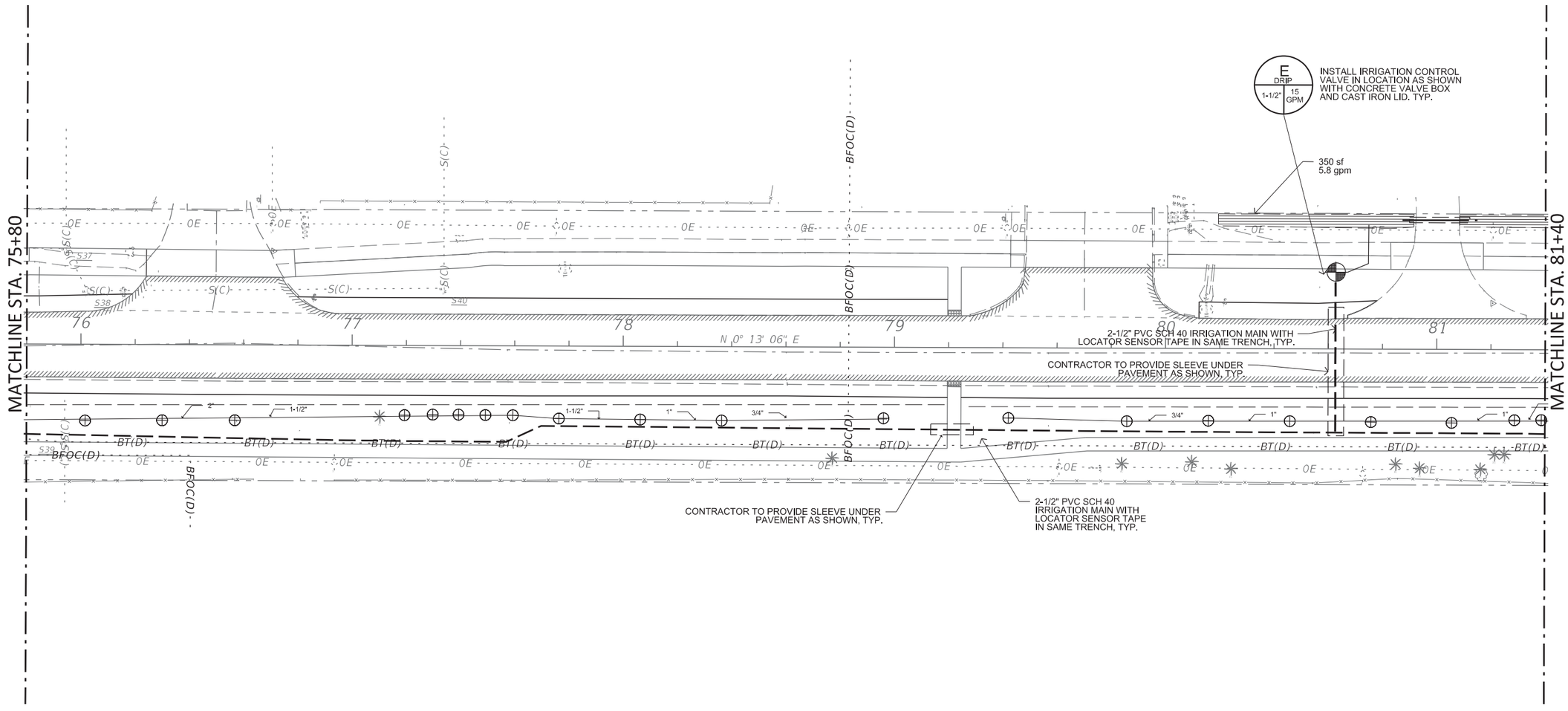
TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION PLAN 12

SHEET NO. L10



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

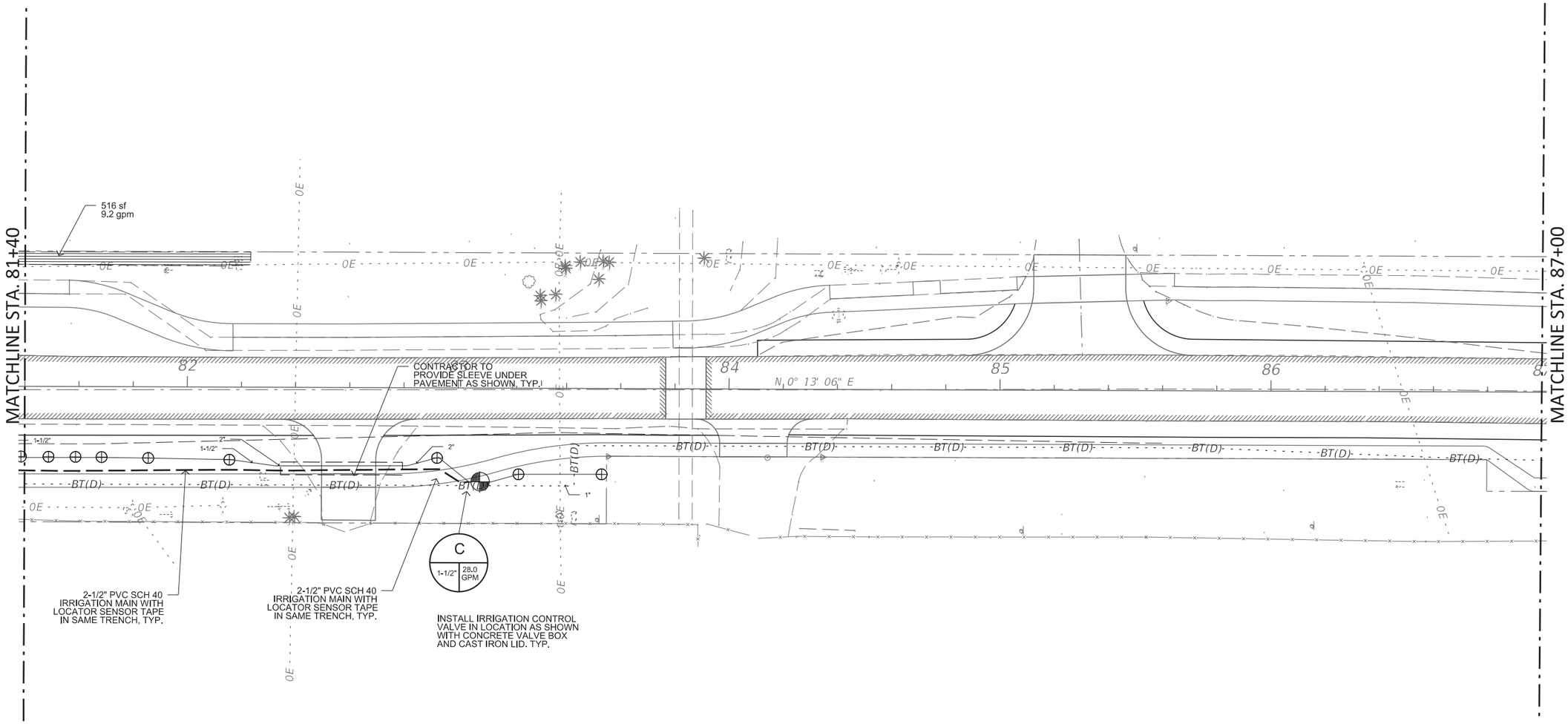
TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION PLAN 13

SHEET NO.
L11



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

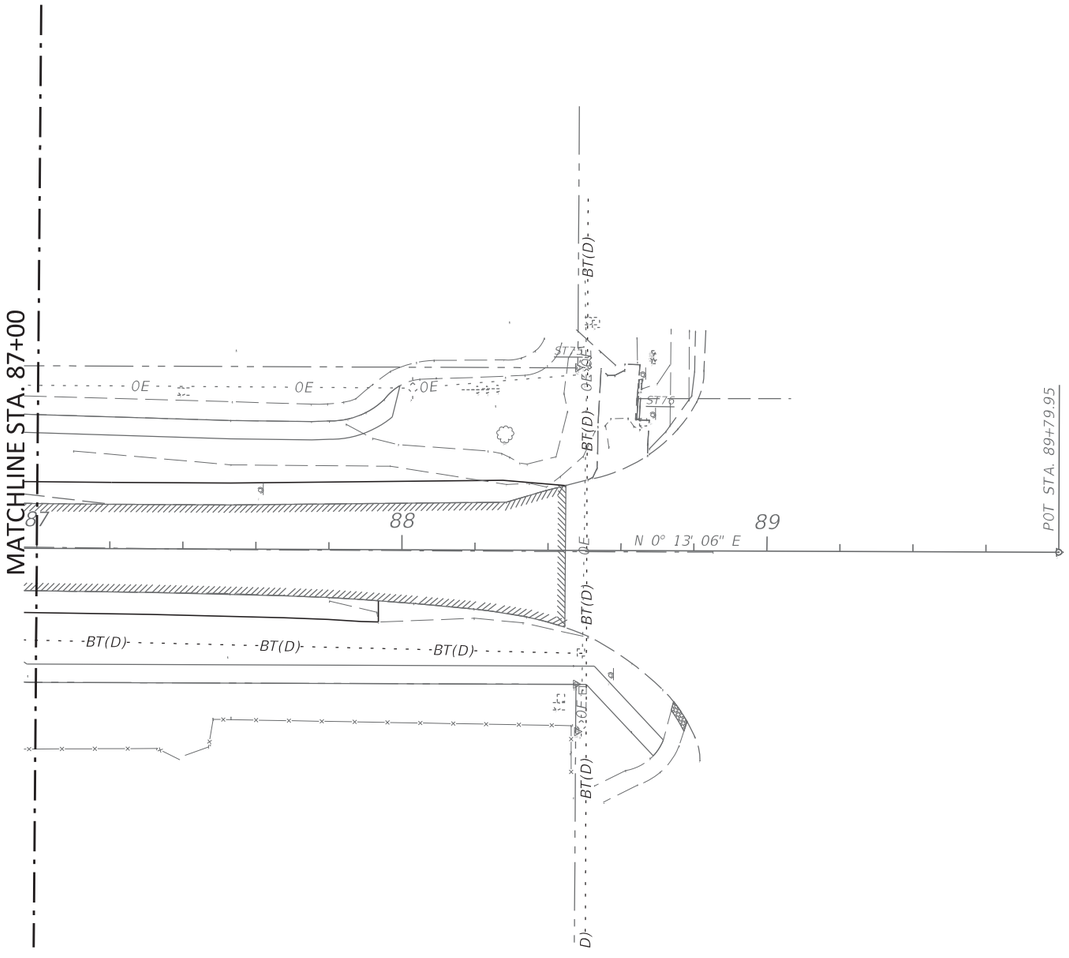
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRRIGATION PLAN 14

SHEET NO.
L12



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION PLAN 15

SHEET NO.
L13

GENERAL NOTES:

1. Roadway Design Speed is **30 MPH**. Criteria for a **30 MPH** design speed for **46th Street WALK/BIKE STREETSCAPE PROJECT** was the basis for the design setbacks criteria for this project. Which includes a 13' Clear Zone from edge of pavement face of tree or palm.
2. Project limits are from North of Busch Blvd to South of Fowler Ave., Station points as shown on plan. These have been used in order to establish Landscaping Clear Zones for the median plantings, for the roadway for the project.
3. Standard Indexes 613, 616 and 619 will be used for the Maintenance of Traffic for landscaping work as well as the FDOT 2019 Design Standards.
4. Criteria based on the FDOT 2019 Plans Preparation Manual and the 2007 AASHTO "Green Book".
5. In accordance with Rule 14.40.003(3)(b), Florida Administrative Code, no planting is allowed which screens, or when mature will screen an outdoor advertising sign permitted under Chapter 479 F.S. billboard noticed have been issued to billboard owners by certified letter.
6. No vegetation to be placed in a manner whereby official departmental traffic control signing would be discerned as being screened.
7. All applicable departmental Maintenance of Traffic standards to be utilized at all times while construction and maintenance activities are being performed as a result of this project.
8. A minimum vertical clearance of 12' between the grade of the travel lanes/ways and the bottom canopy of foliage to be maintained at all times.
9. A minimum vertical clearance of 8.5' between the grade of sidewalks and the bottom canopy of foliage to be maintained at all times.
10. Trees and palms will be not be planted closer than 15' to any overhead powerlines.

PAY ITEM NOTES:

EXISTING LANDSCAPE

All existing landscape to remain in place unless specified on the plans. Patch existing sod in areas disturbed by construction with utilizing the existing sod type, after construction is completed.

CLEARING AND GRUBBING

Where plant beds, trees and palms are installed in sodded areas or areas with other plant growth, existing plants to be removed, and the plant bed prepared to meet the requirements below before planting. Existing sod to be treated with herbicide and follow manufacturer's directions for the appropriate waiting period to confirm the sod is dead, before continuing construction of the landscape. The plant beds to be marked, and the sod removed within the plant beds areas. Project site to be free of shrub/tree/palm paper, boards, chips, sticks, trash, or any other undesirable material. There to be no exotic or noxious weeds or weed seeds (i.e. Nut grass, Bermuda grass, Sedges and the like). In no case to there be more than 5% by volume of stones, limestone, asphalt waste to pay items ratio. Where plant beds, trees and palms are installed in sodded areas or areas with other plant growth, existing plants to be removed, and the plant bed prepared to meet the requirements below before planting. with the peanut. Plant beds to have Bahia sod removed in its entirety to a depth of 3" before planting any of the shrub and ground cover materials.

PREPARED SOIL LAYER 3" DEPTH

All palm, tree and shrub planting pits to be supplemented with 3" of Prepared Planting Soils for each plant item during installation. See Specifications for Prepared Planting Soils. Maximum Soluble Salts: 200 ppm. Contractor to submit sample and soil analysis, for approval by City of Tampa Construction Representative, before delivery to site.

FERTILIZER

Provide Agriform tablets into planting pits for each palm or tree. For Trees - use slow release 20-10-2 slow release formulation, for Palms use 8-2-12-4 slow release formulation. Install as per manufacturer's directions.

IRRIGATION

Provide a Lump Sum Unit Price for the drip irrigation system and all appurtenances for the irrigation system as shown on the Plans. This shall include the connection to the potable water meter and tap into the 12" water main. Coordinate with City of Tampa Construction Representative. The entire 12-month Warranty Period will require plant watering, as needed. This supplemental irrigation will be needed to keep the plant materials in no less than a Florida #1 condition. Any plant materials that suffer or perish due to over or under watering will need to be replaced.

See plans notes and details for specific irrigation equipment items, required by City of Tampa that requires a sole source letter for approval. Irrigation controller requires 120v 20amp 1ph service from power pole located on site. Coordinate with TECO to obtain the meter box and connections. Connect meter to controller with underground cables, conduits, sleeves and connectors, as needed to provide complete power service.

PRE-EMERGENT ON PREPARED SOIL LAYER

Prior to mulching, the proposed plant beds indicated on plans, to be treated with granular Pre-Emergent Herbicide containing 1% Benefin and 1% Oryzalyn. Apply granular herbicide per manufacturer's directions. Use a properly calibrated granular applicator and do not apply chemical directly onto leaves of plants. Applicator to be licensed by State of Florida and trained and Certified for proper application.

LANDSCAPE COMPLETE - B+B Plant Materials

The B+B (Balled + Burlap) plant materials to be field grown, hardened-off a minimum of 3-4 weeks before delivery to job site and to be balled and burlap and of sizes according to the 2015 Florida Grade and Standards for Nursery Plants. All other material under this pay item number is to be container grown.

LANDSCAPE QUALITY STANDARD

All Plant materials to be delivered to the site in a 'Florida No.1' condition, according to the 2015 Florida Grades and Standards for Nursery Plants. Root ball, canopy spread, overall height as well as caliper inches, to comply with 'Florida No.1' requirements.

TREE PLACEMENT

Adjust trees and palms to be placed as far from utilities as possible, with the 811 locator.

LANDSCAPE COMPLETE - STAKING AND GUYING

Staking and Guying to be included in the cost of the plant material. Staking and guying to be per the requirements of Index No. 580, FDOT Design Standards 2019. Staking and Guying to be maintained throughout the one-year warranty period, and to be removed at the end of that year at Contractors expense.

LANDSCAPE COMPLETE - MULCH - WOOD CHIPS

All new shrub beds to be mulched with 3" depth of either Pine Bark-Mini-Nuggets (1-1/2"-3" pieces) or "Enviro-mulch" mulch material. Cypress mulch will not be allowed on the job site. Planting quantities do not include mulch in shrub beds or tree/palm beds and individual trees/palms. The mulch to be free of other vegetative yard waste, plastic, glass, metal, palm trees, sand and other foreign materials. The mulch to have the consistency of appearance. The mulch to be certified to be sterile and free from viable weed and grass seed. Submit samples in 1-gallon Ziplocs bags to Project Tampa Construction Representative, for approval before delivery to site.

LANDSCAPE COMPLETE - 12 MONTH MAINTENANCE & WARRANTY PERIOD

There will be a Landscape Establishment and Maintenance period of 12-Months after Final Acceptance, include in the contract pricing during bidding, for the items shown in the project specifications. The date of Final Acceptance will be determined by City of Tampa Project Representative and will be based on the contract being fully and satisfactorily executed to the requirements of the plans and specifications. All plant materials to be maintained in a Florida #1 Condition. Any plant materials not found to be in this condition to be replaced, including materials and labor, at the end of every calendar month, from date of Final Acceptance until 12 months from the date of Final Acceptance.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

GENERAL NOTES 1

SHEET NO. L14

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

GENERAL LANDSCAPE NOTES

1. Prior to submission of bid, visit the site and become informed of the conditions under which the work is to be accomplished.
2. The work includes irrigation provision and installation, power requirements for irrigation controller, water meter tap coordination, soil preparation, finish grading, supplying and planting of palms, trees, shrubs, groundcovers and sod, of the species, sizes and quality as shown on the drawings and/or as specified herein. Included will be staking, guying and mulching as required and shown in details.
3. Provided plant material to be graded Florida No.1 or better as outlined under the 2015 - Grades and Standards for Nursery Plants, Parts I and II, State of Florida, Department of Agriculture, and to conform to AAN Standards for Nursery Stock (ANSI 260.1-1980).
4. Provide a Lump Sum Price for drip irrigation, spray irrigation and tree bubbler irrigation and required piping, trenching and equipment for the items shown on the unit item bid sheet. The cost to be inclusive of all power requirements, controller, meter valves, flow controls, fixtures, pipes and appurtenances for the installation and activation of an irrigation system for the project shown on these plans. Connection to tap into potable water line to be provided and coordinated with City of Tampa. The pricing for the irrigation system to be a Lump Sum price. Supplemental irrigation watering is to maintain the plant materials in a Florida No.1 condition as per the 2015 Florida Nursery Grades and Standards.
5. Provide any and all necessary specialty permits for the work, prior to commencement of their operations on-site. Copies of permits to be sent to the City of Tampa Construction representative.
6. Verify all utility locations (existing and proposed), related paving, elevations, water and electrical supply, etc. prior to start of work. Notify the City of Tampa Construction Representative in writing of unsatisfactory conditions prior to start of work. Start of work will indicate acceptance of conditions and full responsibility for completed work.
7. Verify all underground and above ground and overhead utility locations prior to any excavation. If underground construction, utilities or obstructions are encountered during the excavation of planting areas or pits, immediately inform the City of Tampa Construction Representative. Alternate locations for the plant material(s) will be selected by the City of Tampa Construction Representative. Such changes in location to be made by the Contractor without additional compensation.
8. Provide sole responsibility for any and all damages that result from activities due to improper verification of utilities and/or operator error during excavations. Coordinate on-site with the City of Tampa Construction representative before digging or commencement of any work.
9. Project Site to be clear of debris and weed growth before any plantings to commence. If weed growth is still present and viable, re-spray with herbicide and wait the required time period, according to manufacturer's instructions.
10. Required erosion control measures to remain intact throughout construction. Proposed storm water runoff for the street trees and palms to be directed to the nearest inlets.
11. Notify the City of Tampa Construction Representative of site conditions which may require planting design adjustments. Submit proposed changes for written approval to City of Tampa Construction Representative prior to the installation of plant materials.
12. Planting Limits refer to FDOT Standard Index 700 and are based on project design speed and median applications for this project, which is based on <30mph.
    Outside roadways: Locate trees no less than 4 feet from face of curb in accordance with Design Standard Index 546
13. All trees to be single trunked and cleared to a height of a min of 8.5" above finished grade within the medians. See FDOT index 700 and FDOT Index 546.
14. If containers are used, then container size is to be as specified. A minimum of 80% of the container root ball must contain active and viable root system. Girdling or "ring" roots are prohibited and will be cause for rejection of plant material. See notes and details for root observations and corrective actions. Be responsible to demonstrate the root ball conditions of the plan materials while the plantings are either on the truck at time of delivery or in-field, to Landscape Architect to illustrate root conditions of the plant materials. Any root ball or container planted materials that cannot be corrected in field to be rejected and will need to be replaced at contractors' expense.
15. No substitutions will be made without the explicit written permission of the City of Tampa Construction Representative. Submit written verification of any plant material(s) that may be unavailable as specified during the bid process, to the City of Tampa Construction Representative.
16. Landscape Architect of Record to review, before any delivery to the construction site, all proposed trees, shrubs and ground cover materials, by means of accurate and representative photographs taken from nursery of the grower of the materials, that will be delivered to job site. Submittal to be in an electronic e-mail format sent to City of Tampa Construction Representative. The project name and location to be labeled on the front of each e-mail, with the Contractor's name, address and phone number listed on the inside first page with the index of photographs.
17. The City of Tampa Construction Representative reserves the right to make minor adjustments, in the field, to the locations of trees, palms, shrubs and groundcovers. Do not remove vegetation by grubbing or place soil deposits, debris, solvents, concrete, paint, chemicals or other foreign substance in or on the soil. Required tree barricades and erosion control measures to remain intact during construction. No construction debris, construction materials, machinery or equipment of any kind placed within the dripline of a tree to remain on the site. All areas within the dripline of a protected tree to be maintained at their original grade with no trenching of cutting of any kind.
18. In the event of a variation between the plant list and the actual number of plants shown or noted on the plans, the plans to control. City of Tampa Construction Representative to be notified of any discrepancy during bid process in writing, with the plans taking precedent over tabulation list.
19. Plants and trees to be set plumb, at the same grade at which they have been grown, best side facing prime visibility and thoroughly watered-in at time of planting to eliminate air pockets. If site conditions are unfavorable to vigorous plant growth, the City of Tampa Construction Representative to be notified prior to submitting bid and commencing construction. The conditions are considered accepted, if written notification is not received by City of Tampa Construction Representative before commencement of installation of the materials.
20. Provide proper drainage for all trees and plant materials. Trees set too high or low may be rejected. Verify proposed finish grades and set trees accordingly. See details for planting, staking and guying.
21. Properly securing all trees, palms and large shrubs immediately after planting. Tree bracing to be performed by the detail shown on plans for bracing the rootball. Install flags on all guy wires to indicate location.
22. Shrubs to be planted as shown on plans. Trees and palms to be backfilled with native excavated soils and prepared planting soils (see specifications). Remove container and all synthetic bindings from trees and palms, vertically slice the rootball perimeter to a depth of 12" for optimum growth. Each slice to be the width of a shovel or 12" in width.
23. All trees within FDOT Standard Index 546 Clear Sight Limits to have 8.5' clear trunk above the nearest pavement elevation, to the lowest point on the tree canopy.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

LANDSCAPE NOTES 1

SHEET NO. L15

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

24. Provide a 12-month Warranty, from date of Final Acceptance, for all plantings as part of this contract. Dead plantings to be replaced as needed, monthly.
25. Maintain the watering required for the establishment of plant materials from the date of installation to the date of the Final Acceptance. The cost of watering and its application to be borne by contractor until Final Acceptance by City of Tampa. Providing any additional hand watering as necessary for all plant materials on the project.
26. Responsibility of watering and maintaining the City of Tampa properties and any FDOT properties after Final Acceptance to be borne by City of Tampa.
27. Replace all Plant Materials that are in a deteriorated and/or perished Condition or that have perished within the 12-month Warranty period. Monthly inspections are required to be performed to determine deficiencies and perished items to be replaced on a monthly basis, as needed.
28. Trees or shrubs shown in a line on the plan to have the trunks/canopies in proper alignment upon visual inspection after installation. Groundcover and shrub beds to be planted on triangular spacing with plants installed and faced for optimum growth into the bed.
29. Any areas subject to erosion (e.g. grass swales, retention area embankments) must be stabilized by solid Bahia sod.
30. The job site to be kept orderly and reasonably clean on a daily basis during construction operations. Upon daily completion of work, remove all debris and waste generated by operations on-site, including the cleaning of walks and paving.
31. The maintenance period for plantings begins at time of installation and continues until end of 12-month Warranty period. At end of 12-month Warranty period, City of Tampa will assume maintenance responsibility.
32. Provide clearly delineated electronic prepared As-Built PDF drawings of landscape and irrigation, to the City of Tampa Construction representative at end of project. This consists of representations of quantities and locations all planted palms, trees, shrubs, groundcovers and turf areas prior to final acceptance. Upon completion, deliver to City of Tampa Construction representative. Hand marked plans will not be acceptable.
33. An "As-Built" of the landscape plans to be provided and signed and sealed by a Landscape Architect Registered in the State of Florida. The Landscape Architect to be obtained by the Contractor. Submit to the City of Tampa Construction Representative prior to the final walk-through and Final Acceptance. The "As-Built" to be up-dated daily and to be kept on-site at all times during the construction period.
34. Any and all deviations from the original construction documents to be duly and accurately recorded. A PDF of the Final Construction Plans to be the basis for the As-Builts mark-ups.
35. At the time of Final Acceptance, provide the City of Tampa Construction Representative, with a maintenance manual containing instructions for the proper care of all materials specific to the job, and any pertinent manufacturer's literature. This shall be passed to the City of Tampa Construction Representative. City of Tampa to assume maintenance for the plant materials at end of 12-month warranty period.
36. All landscape material to be installed and maintained at all times in a manner whereby traffic control signage and devices are visible to motorists and pedestrians.
37. All Landscape material to be maintained in accordance with FDOT Standard indices 546 and 700 and all other applicable Department standards and regulations. http://www.dot.state.fl.us/rddesign/DS/15/STDs.shtm
38. Application of herbicides to be performed by a person possessing a current Florida Restricted Use Pesticide License in the Core Curriculum, Right-of-way and Aquatic Categories.
39. Pursuant to section 2.10 of the departments “Roadway and Roadside Maintenance” Procedure (topic No. 850-000-015-I of 91/01/2014), all individuals who contract the application of fertilizer to ensure that they are licensed commercial applicators who have been trained through the Green Industry BMP Program, and have obtained a limited certification for Urban commercial fertilizer application under Section 482.1562, F.S. Furnish the FDOT current copies of licenses/certifications belonging to the personnel that will be involved in the application of fertilizer on the FDOT right of way prior to start of work.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

LANDSCAPE NOTES 2

SHEET NO. L16

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

46TH STREET WALK/BIKE PROJECT

LANDSCAPE TABULATIONS
100% SUBMITTAL

PLANTINGS:					PLAN	PLAN	PLAN	PLAN	PLAN	PLAN	
SYM	COMMON NAME	BOTANICAL NAME	Container size	SPECIFICATION	10	11	12	13	14	15	TOTAL
LARGE TREES AND PALMS:											
SPE	Sabal Palm - Enhanced Root'	SABAL palmetto 'enhanced root' Provide Certification of "enhanced root process"	B+B	Staggered ht.s 16' ct to 24' ct. Keep frond bases intact. Min 16" caliper	4	1	5	7	3	0	20
LID	Crepe Myrtle 'Red Rocket'	LAGERSTROMEA indica 'Red Rocket'	65 gallon or B+B	12'-14' x 10' spread, 6' c.t 4" caliper standard	0	11	8	13	5	0	37
Small shrubs and ground covers:											
SS	Simpson Stopper	MYRCIANTHES fragrans	7-gal	36" ht x 24" spread				29	23		52
	Prepared Planting soils		CY	CU YARDS	0.7	2.0	2.2	3.3	1.3	0.0	8.8
	Pine Bark mulch		3" depth	CU YARDS	0.3	1.0	1.1	1.7	0.7	0.0	4.4

Each Tree shall have Agriform Tablets in each planting pit, 20-10-5 slow release. Install as to manufacturers directions.
Each Palm shall have Agriform Tablets in each planting pit, 8-2-12-4 slow release. Install as to manufacturers directions.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

LANDSCAPE TABULATIONS

SHEET NO. L17

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

46TH STREET WALK/BIKE PROJECT

IRRIGATION TABULATIONS March 16-2020

	IRRIGATION	SOLE SOURCE LETTER PROVIDED		PLAN	PLAN	PLAN	PLAN	PLAN	PLAN	
Pay Item #	ITEM		UNIT	10	11	12	13	14	15	TOTAL
25.00	CONNECTION TO TECO POWER METER		EA			1				1
25.01	TREE BUBBLERS 1/2 GPM - RAINBIRD 1402 - Install 2 per Tree	Y	EA	8	24	26	40	16	0	114
25.08	DRIP IRRIGATION-K-FLEX TUBING	Y	SF	45	125	125	275	250	0	820
25.02	3/4" PVC FLEX PIPE		LF	20	20	50	100	35	25	250
25.03	3/4" PVC SCH 40 PIPE		LF		50	50	75	35	25	235
25.04	1" PVC SCH 40 PIPE		LF		50	50	75	35	25	235
25.05	1-1/2" PVC SCH 40 PIPE		LF		100	250	150	50	80	630
25.06	2" PVC SCH 40 PIPE		LF			200	200	100		500
25.07	2-1/2" PVC SCH 40 PIPE - MAIN		LF			500	500	100		1100
25.08	LOCATOR TAPE ALONG MAIN		LF			500	500	100		1100
25.1	2" BALL VALVE		EA			1				1
25.11	1" BACKFLOW PREVENTOR		EA			1				1
25.12	6" PVC SLEEVE WITH DIRECTIONAL BORE		L/F		150	120	70	70		410
25.12	CONCRETE VALVE BOX WITH CONC LID		EA			5	1			6
25.2	MIR/irrinet CONTROLLER	Y	EA			1				1
25.21	IRRITROL 200b ELECTRIC CONTROL VALVE 1" SAM - NO PRS	Y	EA			2	1	1		4
25.22	MASTER METER, INC. FLOW METER- 1-1/2"- MULTI-JET WITH ELEC. OUTPUT REGISTER	Y	EA			1				1
25.23	IRRITROL MASTER CONTROL VALVE 216B, WITH DC LATCHING SOLENOID	Y	EA			1				1
25.24	14-2 MAXICOM SOLID SHIELDED WIRE TO CONTROLLER	Y	LF			35				35
25.25	KING WIRE NUTS	Y	EA			12	6	3	16	37
25.26	RAINBIRD QUICK COUPLER RC-3	Y	EA			1	1			2
25.27	PRESSURE REGULATOR - 3/4"		EA				1	1		2
25.28	DISK FILTER - 1" DF-100		EA				1	1		2
25.29	LINE FLUSHING VALVE 3/4"		EA				2	1		3
25.3	AIR/VACUUM RELIEF VALVE 3/4"		EA				2	1		3
25.4	BID ALLOWANCE FOR CONTRACTOR TO INSTALL 1-1/2" WATER METER		EA	1						1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

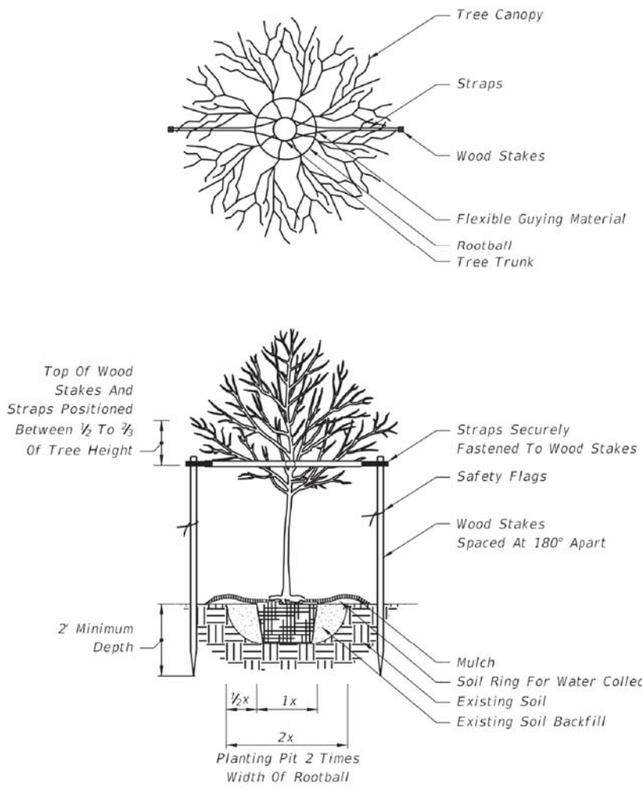
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

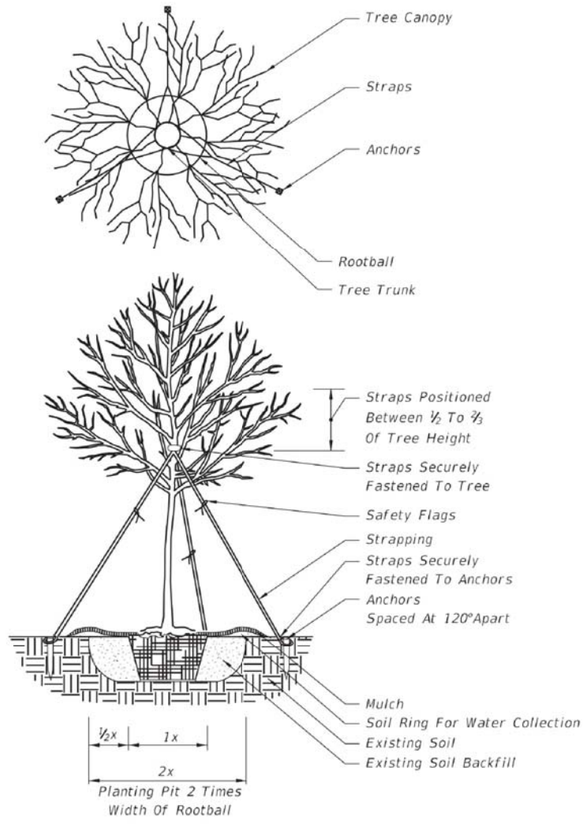
IRRIGATION TABULATIONS

SHEET NO. L18

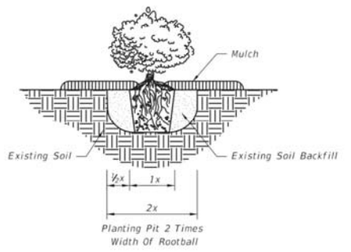
$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$



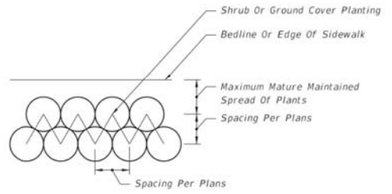
1" - 3 1/2 " CALIPER TREE PLANTING



4" AND LARGER CALIPER TREE PLANTING



GROUND COVER/SHRUB PLANTING



GROUND COVER/SHRUB LAYOUT DETAIL

GENERAL NOTES:

1. All dimensions 6" and less are exaggerated for illustrative purposes only.
2. Plant containers shall be removed prior to planting. If plants are not container grown, remove a minimum of the top ⅓ of burlap, fabric, or wire mesh. Never lift or handle the tree by the trunk.
3. The uppermost root on all trees shall be covered by less than 1" of soil. Use hand tools to carefully remove all excess soil. The top of root ball shall be set 1"-2" above finish grade and set plumb to the horizon. If planting pit is too deep, remove the tree and firmly pack additional soil in the bottom of the planting pit to raise the rootball. After positioning the tree in the planting pit, slice through rootball's with 3 or 4 vertical slices (top to bottom) equally distributed around the tree.
4. Backfill shall be loosened existing soil. Remove rocks, sticks, or other deleterious material greater than 1" in any direction prior to backfilling. Water and tamp to remove air pockets. If existing soils contain excessive sand, clay, or other material not conducive to proper plant growth, contact Engineer prior to planting.
5. Soil rings shall be constructed of existing soil at the outer edge of the planting pit, with a height of 3" and gently sloping sides. Do not pile soil on top of rootball.
6. Mulch shall be a 3" deep layer placed to the edge of the trunk flare, around the base of shrub, or solidly around groundcover. Never pile mulch against the tree trunk.
7. Straps shall be minimum 1" wide nylon or polypropylene. All wood stakes or anchors shall be located beyond the edge of soil ring and located below finished grade, unless otherwise specified.
8. Sabal Palms may be hurricane cut. All other palms must have fronds tied with biodegradable twine. Palm trunks shall have no burn marks, scars, or sanding.
9. All dimensions provided for wood materials are nominal.
10. When a permanent, subsurface, or drip irrigation system is provided, a soil ring is not required. Mulch to edge of planting pit.
11. Alternate tree bracing and guying systems approved by the Engineer may be used in lieu of the tree bracing and guying methods detailed on the Index. Alternate tree protection systems approved by the Engineer may be used in lieu of the tree protection barricade detailed on the index.
12. Remove aboveground guying systems at the end of the establishment period.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

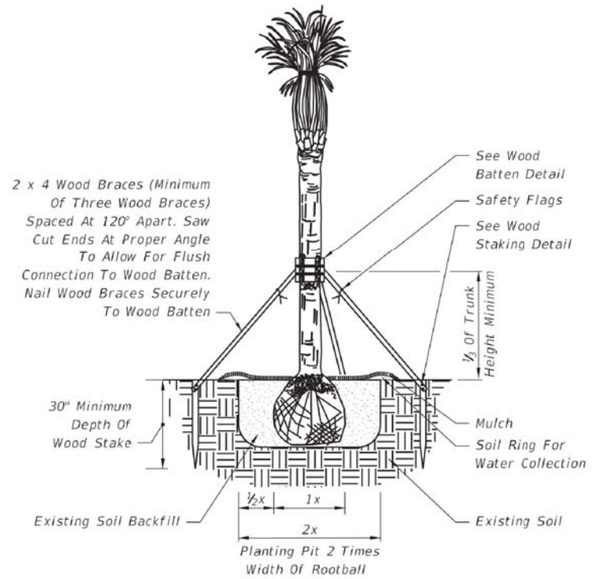
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PLANTING DETAILS 1

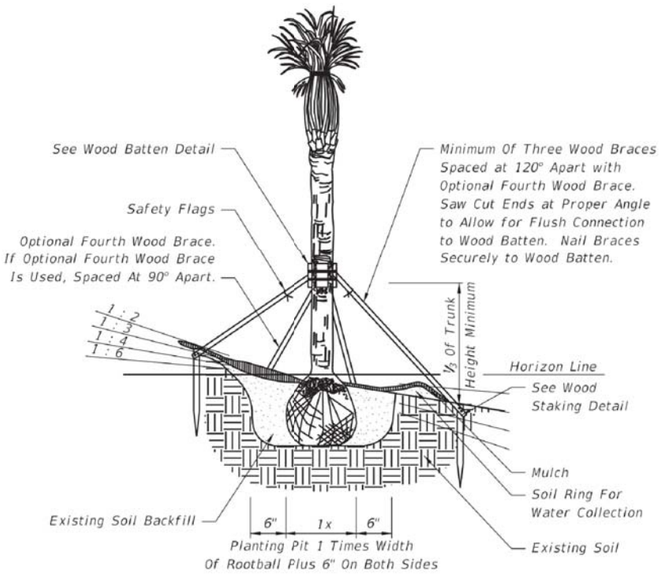
SHEET NO. L19

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$



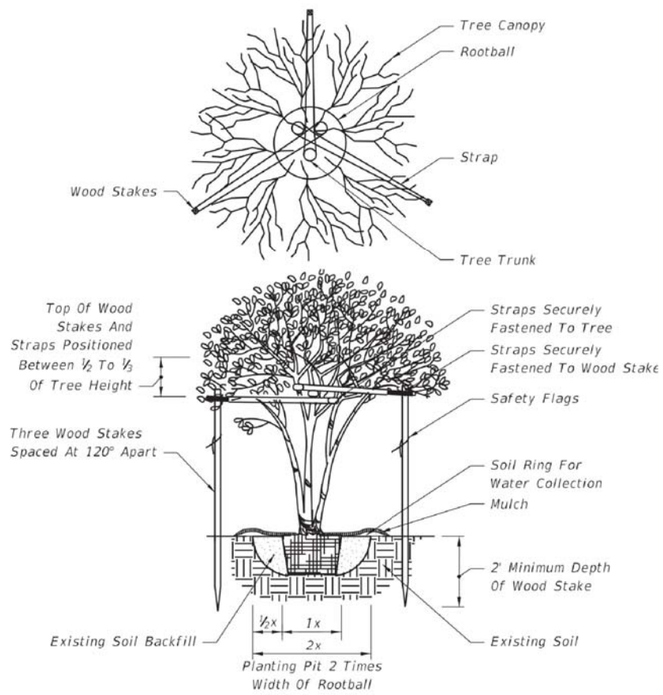
NOTE: For All Other Palms, Use Detail Provided By Landscape Architect In Contract Plans.

CABBAGE PALM PLANTING FOR UP TO 24' CLEAR TRUNK

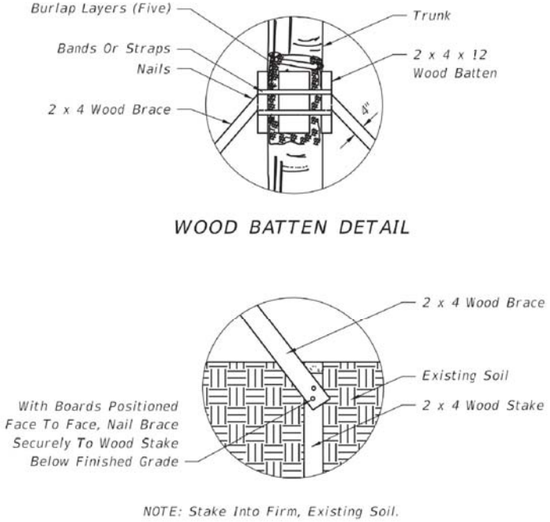


NOTES: Slope Provided As Rise:Run. For All Other Palms, Use Detail Provided By Landscape Architect In Contract Plans.

CABBAGE PALM PLANTING ON SLOPE FOR UP TO 24' CLEAR TRUNK



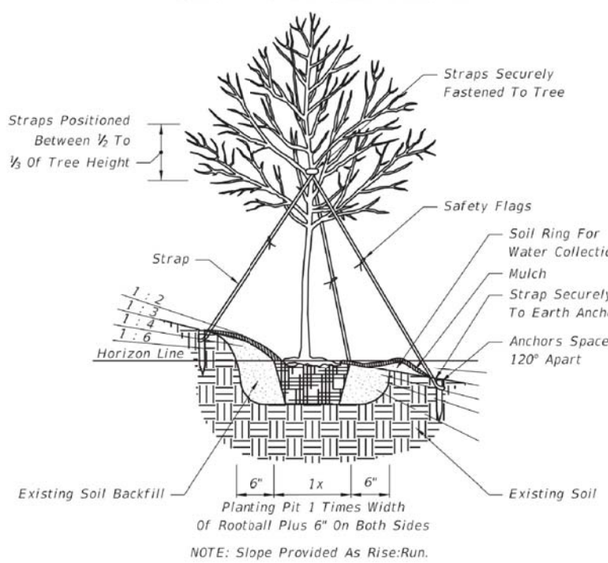
MULTI-TRUNK TREE PLANTING



NOTE: Stake Into Firm, Existing Soil.

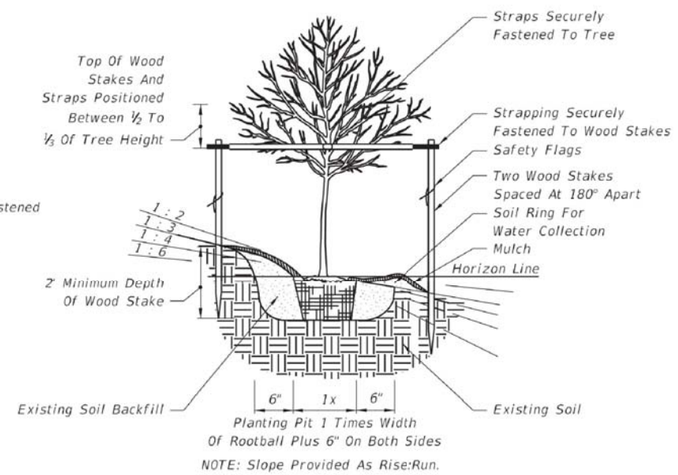
WOOD BATTEN DETAIL

WOOD STAKING DETAIL



NOTE: Slope Provided As Rise:Run.

4" AND LARGER CALIPER TREE PLANTING ON SLOPE



NOTE: Slope Provided As Rise:Run.

1" - 3 1/2 " CALIPER TREE PLANTING ON SLOPE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

PLANTING DETAILS 2

SHEET NO. L20

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

46th Street Walk/Bike Roadway Plan

Streetscape Maintenance Plan Narrative:

The project falls within the USADA Zone 9-9A, with minimum temps between 26-32 degrees F, but only every few years. This project is surrounded by mostly residential and some industrial areas. It can be expected that this landscape will be subjected to incoming winter fronts from the NW and then summer daily rain from June to September with a drastic increase during tropical storms and hurricanes. Summers are typically very hot humid and frequent rainfall in the afternoons. Temperatures in the roadway edges can be harsh as it is surrounded by roadway asphalt & development. The summer warm evening temps can have the tendency to create conditions conducive to fungus production when combined with the high daily rainfall. Supplemental truck watering if needed, and also use of the proposed supplemental irrigation system, will be the source of supplemental watering. Supplemental watering will be required to establish the plantings after installation.

MAINTENANCE PLAN:

Maintenance to be done on the same schedule as the current City of Tampa schedules. This to be on a bi-weekly basis from April through September and a month basis September through March. This includes litter pickup, mowing, edging weed removal and line trimming Pruning, fertilization and mulch replenishment to be done on an annual or semi-annual basis. Maintenance shall be from time of installation to time of Final Acceptance.

Mowing:

The final project surface will be completed with Bahia sod in all areas not defined as plant bed. The mowing to be to a height of 3". This is to remove the seed heads from weeds and help control the invasive weeds. It can also be controlled by applications of specific herbicides, according to manufacturer's directions and frequency, to control initial weed growth after construction.

Edging:
Edging to be performed around the rootball perimeter of the street tree and palm root balls, with a diameter of 6' for each tree and palm. This to coincide with the mowing schedule.

Weeding:
Use of herbicides is encouraged to minimize hand pulling of weeds along the edge of the busy roadway. Care should be taken not to overspray onto the leaves of the desired landscape plantings. Correct applications of the proper herbicides have been proven to work effectively to reduce weeds, but not harm the trees and palms. Only Florida State licensed applicators will be permitted to apply herbicides.

Mulch:
Frequent observation and replacement of mini-pine bark mulch as required to maintain a 2-3" cover will help reduce invasive weeds. Spot mulch, semi-annually as needed for areas that need mulch cover. Contractor to replenish Mulch to a 3" depth at the end of the 12-month warranty period prior to turning the site over to the City Staff for, maintenance.

Pruning:
The plant selections are chosen for their habit of maintaining a small size and pruning should not be required other than an annual trimming of overgrown palm fronds and branches. Dead tree limbs need to be removed as soon as they are seen.

Fertilization:
The trees, shrubs and ground covers to be fertilized annually in March. Use a Time-release 2-8-10 Osmocote or equal, and according to manufacturer's recommendations for the particular plant material. Do not Fertilize in summer months, Check local ordinances for times of non-fertilization within City of Tampa.

Watering:
The watering to be by the proposed In-Ground Automatic Irrigation. Water source for the in-ground irrigation system to be a tap into the existing 12" potable water main and location is shown on plans. Water meter bills to be the responsibility of the Landscape Contractor up to Final Acceptance and then during the 12-month Warranty Period. After the 12-month Warranty Period, coordinate ownership of the meter to City of Tampa-Parks. City of Tampa will assume watering and maintenance after the 12-month Warranty Period.

Electric Meter Bill:

Coordinate installation of electric meter with TECO. Meter will need to be install at location as shown on plan. Power pole location is as shown on plan. Connect meter to irrigation controller with underground cable and all required items to provide power to the controller. Meter bill to be responsibility of Contractor from installation, through Final Acceptance and up until the end of the 12-month warranty period. At end of 12-month warranty period, City of Tampa Parks to assume responsibility of meter bill. Coordinate with COT-Parks representative: Mark Neuberger <Mark.Neuberger@tampagov.net>

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

LANDSCAPE MAINTENANCE NOTES

SHEET NO. L21

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

IRRIGATION LEGEND

ELEC CONTROL VALVES: IRRITROL 200B SERIES 1-1/2"
INSTALL PER MANUFACTURER'S RECOMMENDATIONS. GENERAL
COORDINATE WITH CITY OF TAMPA PARKS/IRRIGATION DIVISION
SHOW ON AS-BUILTS WITH TRANGLE DIMENSIONS FROM FIXED OBJECT
IN LOCATIONS AS SHOWN ON PLANS. INSTALL IN
CONCRETE VALVE BOX WITH CAST IRON LID.

NETAFIM DRIP IRRIGATION TUBING. 12" ON CENTER
SPACING OF TUBING WITH EMITTERS
12" ON CENTER. INSTALL AS PER DIAGRAMS
PROVIDED ON PLANS. USE FILTERS
AND AIR RELIEF VALVES AS INDICATED.

A 12-STATION MOTOROLA AC IRRInet-M CONTROLLER
ASSEMBLY WITH UHF HT750 EXTERNAL RADIO KIT
(MODEL # IMDC-24-RX-S18P-AHT-SA-X).
UNIT SHALL BE MOUNTED IN A STRONGBOX SB-18SS
STAINLESS STEEL ENCLOSURE WITH PEDESTAL.
ASSEMBLY SHALL INCLUDE UHF DOME ANTENNA
KIT AND 12 STATION TERMINAL SET, SOLAREX
MULTIMOUNT MODULE AND HARDWARE,
CHANGE REGULATOR, STORAGE BATTERY,
AND MAST AND WEATHERHEAD.
INSTALLATION SHALL INCLUDE ASSEMBLY, HOT TEST
(IN SHOP), RADIO PROGRAMMING AND OPTIMIZATION.

TECO POWER POLE LOCATION FOR ELECTRIC METER DROP
AND CONNECTION TO IRRIGATION CONTROLLER.
SUPPLY ALL NECESSARY ITEMS - WIRING,
CONDUITS, SLEEVES, TO PROVIDE POWER
TO CONTROLLER AT LOCATION SHOWN.

M

1-1/2" POTABLE WATER METER FOR IRRIGATION. CONTRACTOR
TO COORDINATE AND BE REPONSIBLE FOR INSTALLATION.
COORDINATE WITH WITH CITY OF TAMPA WATER DEPARTMENT.

BF

1-1/2" TOP PORTED BACKFLOW PREVENTOR
INSTALL IN VALVE BOX -SUBSURFACE.
COORDINATE WITH COT PARKS
CONSTRUCTION REPRESENTATIVE

TREE BUBBLERS: HUNTER PRO-SPRAY WITH MSBN NOZZLE; 1/2 GPM
INSTALL AT PERIMETER OF ROOTBALL. INSTALL TWO BUBBLERS PER TREE

INDICATES PVC SCH 40 SLEEVE SIZED TWO PIPE SIZES LARGER
(INSIDE DIAMETER) THAN LATERAL LINE "WET PIPE" INDICATED ON
PLAN.

SCH 40 PVC MAINLINE-2-1/2". LOCATE IN PLANTING AREAS NOT UNDER
PAVEMENT EXCEPT IN SLEEVES, AS SHOWN ON PLAN.
INSTALL IN TRENCH WITH LOCATOR TAPE.

INDICATES PVC LATERAL LINE:
CLASS 200 = 3/4" LINE OR SMALLER CLASS 160 = 1"+ LINE

P.O.C.: LANDSCAPE CONTRACTOR TO COODINATE INSTALLATION OF 1-1/2" POTABLE WATER METER
AND TAP INTO EXISTING WATER MAIN. COORDINATE WITH CITY OF TAMPA CONSTRUCTION REPRESENTATIVE.
INSTALL TOP PORTED BACKFLOW PREVENTER AS DESCRIBED IN SPECIFICATIONS
VERIFY THAT PSI AND GPM OF METER
ARE ADEQUATE FOR SYSTEM. CONTACT CITY OF TAMPA CONSTRUCTION REPRESENTATIVE
IF THERE IS A DISCREPANCY BETWEEN THE PLAN AND SYSTEM AS INSTALLED
PROVIDE ENTIRE SYSTEM DOWNSTREAM OF METER, INCLUDING A BALL VALVE SHUT-OFF.

ZONE #
PSI REQUIRED AT NOZZLE
GPM

NOTE: ALL MAINLINE AND LATERAL LINES SHALL BE INSTALLED IN
PLANTING AREAS AND SLEEVED UNDER PAVING AREAS AND ARE ONLY
DIAGRAMATICALLY LOCATED ON THIS PLAN.

NOTE:
WHEN DIGGING NEAR EXISTING TREES, FIELD ADJUST HEADS, LINES AND
TRENCHES TO AVOID CUTTING ROOTS 1/2" AND GREATER IN DIAMETER.

NOTE: SIZE PIPES TO NOT TO EXCEED 5 FPS
(FEET-PER-SECOND) OF FLOW RATE. PSI AND GPM AT ALL HEADS SHALL
MATCH MANUFACTURERS DESIGN SPECIFICATIONS AS CALLED FOR ON PLANS
DETERMINED BY HEAD TYPE ON CHART.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION LEGEND

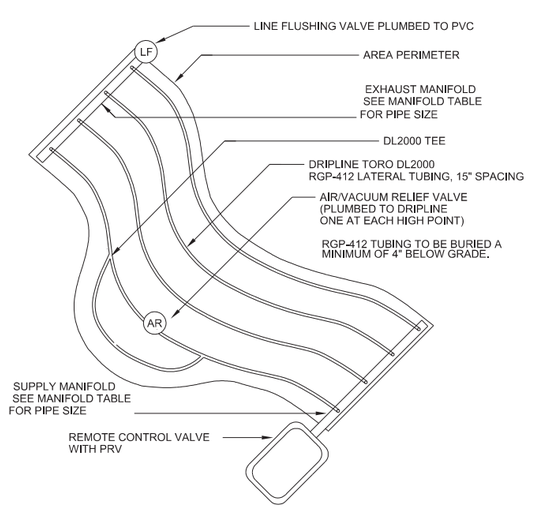
SHEET NO. L22

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

GALLONS PER MINUTE (GPM)	MANIFOLD PIPE SIZE, PVC SCH. 40
0 - 6	3/4"
7 - 10	1"
11 - 17	1 1/4
18 - 24	1 1/2"
25- 42	2"
43 - 75	2 1/2"

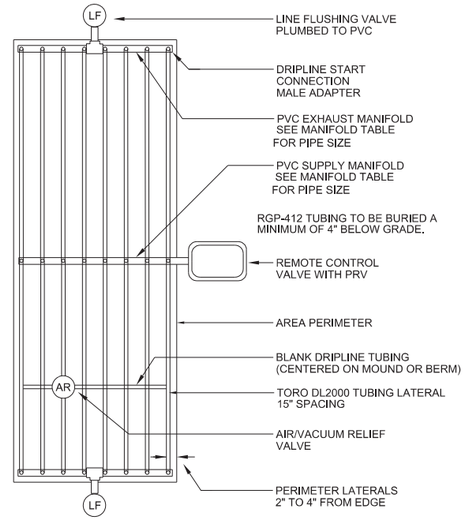
REFER TO EACH DRIPLINE IRRIGATION ZONE ON PLAN DRAWINGS FOR ZONE GPM.

(F) DRIPLINE SUPPLY AND EXHAUST MANIFOLD PIPE SIZE TABLE

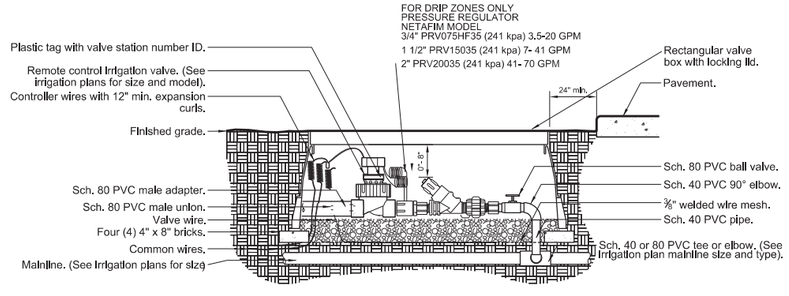


(G) IRREGULAR AREAS: ODD CURVES

NTS



(H) CENTER FEED LAYOUT NTS



Note:
1- Locate valve box within 24" of pavement edge in planting area where easily accessible whenever possible.

2- Common wire and controller wire shall be direct burial 14 AWG or larger. Color: Common (white), controller wire for turf (blue), and controller wire for shrubs (red). (See specifications for 2-wire controllers).

3- All wire runs shall be continuous without any splices unless approved by the Owner's Representative. See splice box detail. Wire connections shall be made using DBR/Y-6 connectors or approved equal.

4-Valve box shall be wrapped with min. 3 mil thick plastic and secure it using duct tape or electrical tape.

5- Mainlines 4" or larger shall use saddles at the connections points to the irrigation valve. (See specifications for Irrigations saddles).

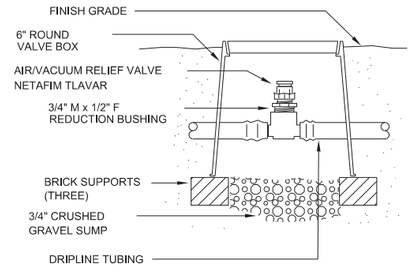
6- All Sch. 80 PVC to Sch. 40 PVC threaded connections shall be made using teflon tape.

7- Valve boxes shall be located in planting areas.

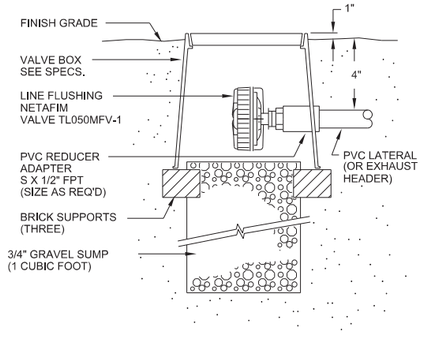
(B) REMOTE CONTROL IRRIGATION VALVE

1 1/2" = 1'-0"

NOTE: MAXIMUM VALVE FLOW RATE, 32 LPM. USE MULTIPLE FLUSH VALVES AS ZONE FLOW RATE REQUIRES. REFER TO PLANS FOR TOTAL ZONE FLOW RATE.



(C) AIR/VACUUM RELIEF NTS



(D) LINE FLUSHING VALVE NTS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION DETAILS 1

SHEET NO. L23

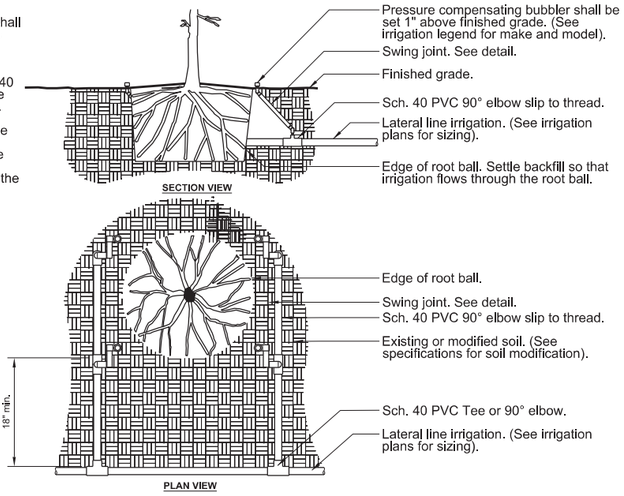
$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

Notes:
1- All irrigation fittings shall be Sch. 40 PVC unless specified otherwise.

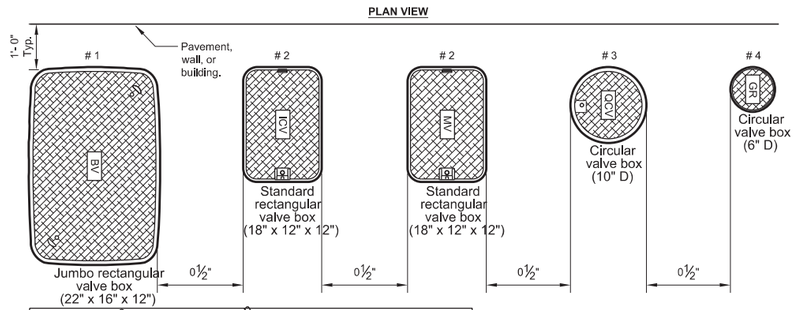
2- All threaded connections from Sch. 40 to Sch. 80 PVC shall be made using teflon tape.

3- Contractor shall settle the area around the bubbler and edge of the root ball so that all irrigation flows through the root ball.



J IRRIGATION BUBBLER (4) W/ LAYOUT

3/4" = 1'-0"



Water type	Controller	Designation	Box size	Lid Color	Identification Guide
PW	A	MV	# 2	Green	Master valve
PW	A	FS	# 2	Green	Flow sensor
PW	A	HM	# 2	Green	Hydrometer
PW	A	BV	# 2	Green	Ball valve 3" or less
PW	A	BV	# 1	Green	Ball valve 4" or more
PW	A	GV	# 2	Green	Gate valve
PW	A	ARV	# 2	Green	Air release valve
PW	A	QCV	# 3	Green	Quick coupler valve
PW	A	RCV	# 2	Green	Remote control valve
PW	A	MS	# 2	Green	Moisture sensor
PW	A	GR	# 4	Green	Grounding rod
PW	A	SB	# 3	Green	Splice box
PW	A	FC	# 3	Green	Future connection

EXAMPLE

Potable water system on Controller 'A', Remote control valve station # 3.
Notes:

1- Valve box # 1 thru # 3 shall have stainless steel locking hardware.
2- Valve boxes shall be labeled by hot iron branding or aluminum asphaltic base water proof paint.
3- Locate valve assemblies in planting area.
4- Valve locations shall be approved by the Owner's Representative prior to installation.
5- Valve boxes shall be centered above valve assemblies to facilitate access and maintenance.
6- Valve boxes shall be flush with finished grade.
7- Valve boxes shall be set parallel to each other and perpendicular to the edge of pavement.
8- See other irrigation details for further information.

K VALVE BOX LAYOUT

1" = 1'-0"

VALVE BOX SHALL BE CONCRETE WITH CAST IRON LIDS

NOZZLE SELECTION CHART FOR SPRINKLERS

SYMBOL	SPEC#/NOZZLE	PSI	GPM	RADIUS	PATTERN
SHRUB SPRAYS & BUBBLER HEADS					
	15F	30	4	15'	FULL
	15A	30	3	15'	THREE QUARTER
	15A	30	2.6	15'	TWO THIRD
	15H	30	2	15'	HALF
	15A	30	1.4	15'	ONE THIRD
	15Q	30	1	15'	QUARTER
	15EST	30	0.6	4' x 15'	END STRIP
	15CST	30	1.2	4' x 30'	CENTER STRIP
	9SST	30	1.2	9' x 18'	SIDE STRIP
	15SST	30	1.45	4' x 30'	SIDE STRIP
	12F	30	2.1	12'	FULL
	12A	30	1.5	12'	THREE QUARTER
	12A	30	1.3	12'	TWO THIRD
	12H	30	1.1	12'	HALF
	12A	30	0.9	12'	ONE THIRD
	12Q	30	0.8	12'	QUARTER
	MSBN10F	30	1	1'	FULL STREAM BUBBLER
	MSBN50H	30	0.5	1'	HALF STREAM BUBBLER
	MSBN25Q	30	0.25	1'	QTR. STREAM BUBBLER
TURF ROTORS					
AA	PGP-ADJ-LA-7	40	3.1	32'	ADJ. FULL
BB	PGP-ADJ-LA-8	40	3.9	34'	ADJ. FULL
CC	PGP-ADJ-LA-9	40	5	37'	ADJ. FULL
DD	I-25-ADS-4	40	3.8	40'	ADJ. FULL
EE	1-25-ADS-7	40	6.6	45'	ADJ. FULL
FF	1-25-ADS-8	40	7.7	47'	ADJ. FULL
GG	I-40-ADS-40	50	8	46'	ADJ. FULL
HH	I-40-ADS-41	50	10.2	52'	ADJ. FULL
II	1-40-ADS-43	50	14.2	58'	ADJ. FULL
JJ	I-60-ADS-7	40	6,5	50'	ADJ. FULL
KK	I-60-ADS-13	40	10	56'	ADJ. FULL
LL	I-60-ADS-18	40	15	59'	ADJ. FULL

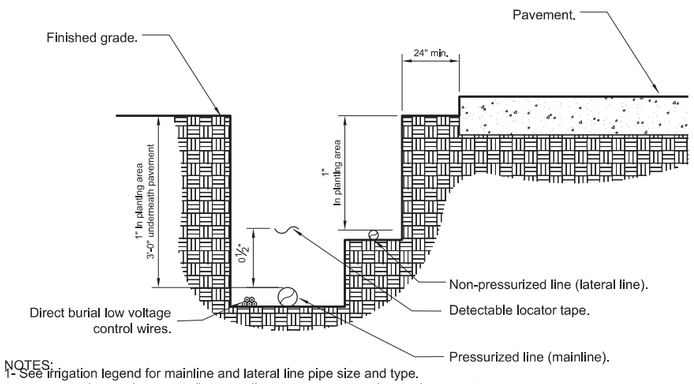
TREE BUBBLER NOTES:

1. LARGER TREES REQUIRE MULTIPLE BUBBLERS USE THE FOLLOWING CHART TO DETERMINE THE NUMBER OF BUBBLERS. BUBBLER SIZES INDICATED ON PLANS

CONTAINER SIZE	BUBBLERS
15 GAL	1
30 GAL	2
45 GAL	3
60 GAL	4
B&B	4
PALM	2

2. TREE BUBBLER WILL BE INSTALLED ON SEPARATE ZONES. DO NOT INCLUDE BUBBLERS ON ROTOR OR SPRAY ZONES. SYSTEM IS DESIGNED FOR BUBBLERS ON SEPARATE ZONES.

3. BUBBLER PIPING NOT INDICATED IN ALL INSTANCES FOR GRAPHIC CLARITY



NOTES:
1- See irrigation legend for mainline and lateral line pipe size and type.
2- Direct burial control wires shall be installed in Sch. 40 PVC electrical conduit if required.
3- 2-wire irrigation wire shall be installed in Sch. 40 PVC electrical conduit.
4- Detectable locator tape shall be located six inches (6") above the entire mainline run.

L IRRIGATION TRENCHING

1 1/2" = 1'-0"

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123

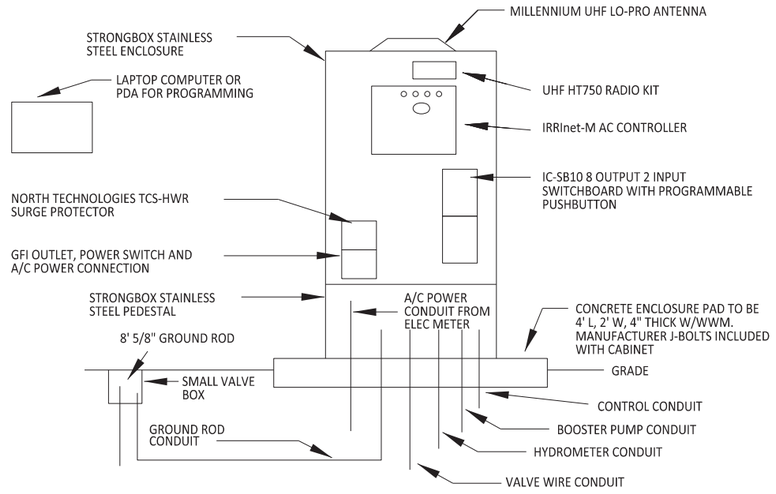
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION DETAILS 2

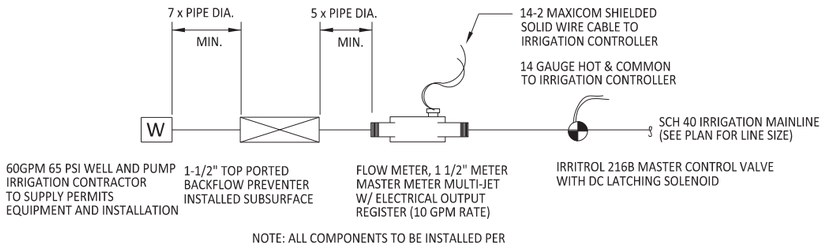
SHEET NO. L24

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$



IRRInet-M AC CONTROLLER

NTS



NOTE: ALL COMPONENTS TO BE INSTALLED PER LOCAL CODE AND MANUFACTURER RECOMMENDATIONS. ALL COMPONENTS TO BE INSTALLED IN SEPARATE PURPLE JUMBO VALVE BOXES.

IRRIGATION WATER SUPPLY & FLOWMETER ASSEMBLY SCHEMATIC

NTS

IRRIGATION NOTES:

1. CONTROLLER SHALL BE (AS NOTED IN DETAIL E ON THIS SHEET) A 12-STATION MOTOROLA AC IRRInet-M CONTROLLER ASSEMBLY WITH UHF HT750 EXTERNAL RADIO KIT (MODEL # IMDC-24-RX-S18P-AHT-SA-X). UNIT SHALL BE MOUNTED IN A STRONGBOX SB-18SS STAINLESS STEEL ENCLOSURE WITH PEDESTAL. ASSEMBLY SHALL INCLUDE UHF DOME ANTENNA KIT AND 12 STATION TERMINAL SET, SOLAREX MULTIMOUNT MODULE AND HARDWARE, CHANGE REGULATOR, STORAGE BATTERY, AND MAST AND WEATHERHEAD. INSTALLATION SHALL INCLUDE ASSEMBLY, HOT TEST (IN SHOP), RADIO PROGRAMMING AND OPTIMIZATION.

2. CONTACT CENTRAL CONTROL SYSTEMS, LTD - MARJIE GIEBEL
P.O. BOX 8683 WOODLAND, CA 95776-8683
PH 530-662-6841
FAX 530-662-3776
E-MAIL: CCS@CONTROLSYSTEMS.COM FOR PURCHASE INFORMATION.

3. CONTROLLER TO BE LOCATED NEAR PROPOSED WELL AND PUMP. CONFIRM WITH PARKS AND RECREATION IRRIGATION SUPERVISOR PRIOR TO INSTALLATION.

4. ALL WIRES NOT UNDER MAINLINE TO BE IN CONDUIT AND LOOSE.

5. WIRES BURIED UNDER MAINLINE ARE TO BE BUNDLED AND TAPED AT 20 FOOT INTERVALS.

6. IRRINET-M, AC CONTROLLER SHALL HAVE 12 WIRES AND 1 COMMON FOR EVERY 6 ZONES AND GROUNDED WITH GROUND RODS TO 10 MEGS.

7. COORDINATE CONNECTION TO POWER SOURCE WITH CITY OF TAMPA CONSTRUCTION REPRESENTATIVE AND DUKE ENERGY. COT-PARKS TO BE RESPONSIBLE FOR WATER BILL FROM TIME OF FINAL ACCEPTANCE

IRRIGATION ZONE DEMAND GALLONS PER MINUTE (GPM)	SUPPLY MANIFOLD PIPE SIZE END AND CENTER FEED	EXHAUST MANIFOLD PIPE SIZE W/END FEED SUPPLY LINE	EXHAUST MANIFOLD PIPE SIZE W/END FEED SUPPLY LINE (TWO EXHAUST MANIFOLDS REQ'D)
0 - 6	3/4"	3/4"	3/4"
7 - 11	1"	1"	3/4"
12 - 19	1 1/4"	1 1/4"	1"
20 - 26	1 1/2"	1 1/2"	1 1/4"
27- 42	2"	2"	1 1/4"
43 - 60	2 1/2"	2 1/2"	2"
61 - 90	3"	3"	2"

REFER TO EACH DRIPLINE IRRIGATION ZONE ON PLAN DRAWINGS FOR ZONE GPM

DRIPLINE SUPPLY AND EXHAUST MANIFOLD PIPE SIZE TABLE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

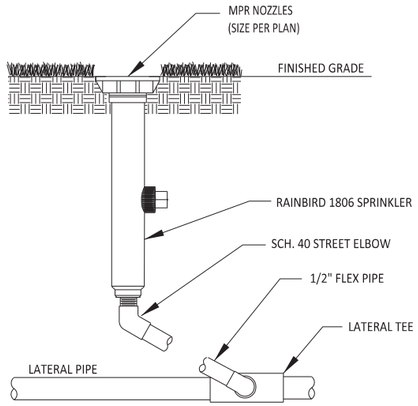
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION DETAILS 3

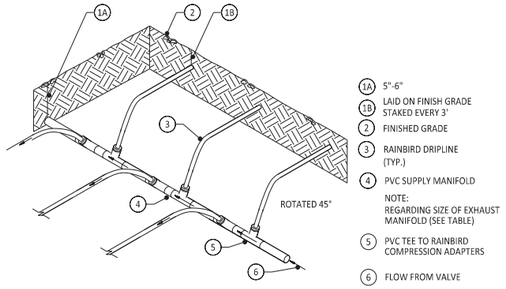
SHEET NO. L25

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$



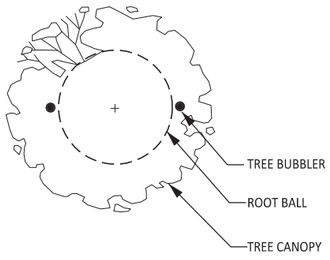
POP-UP SPRAY HEAD

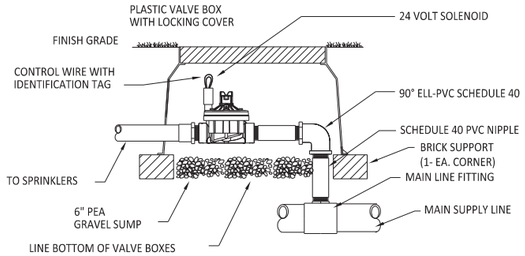
NTS



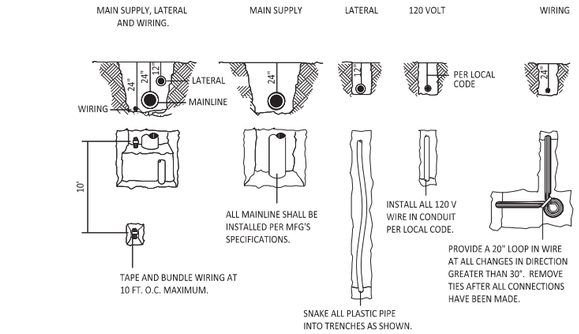
CENTER FEED SUPPLY MANIFOLD

NTS



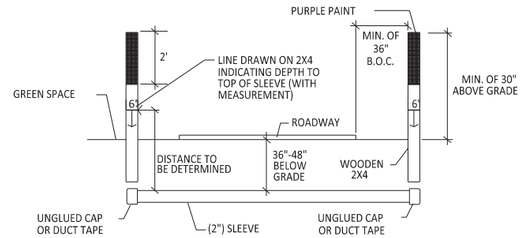


IRRITROL 200B SERIES CONTROL VALVE



TRENCH DETAIL

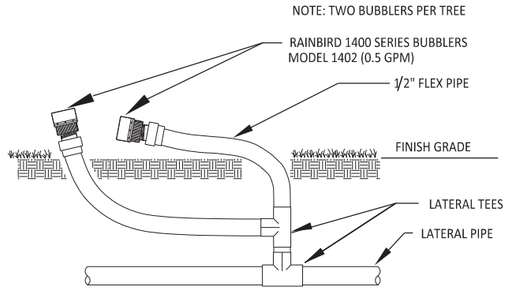
NTS



SLEEVE NOTES

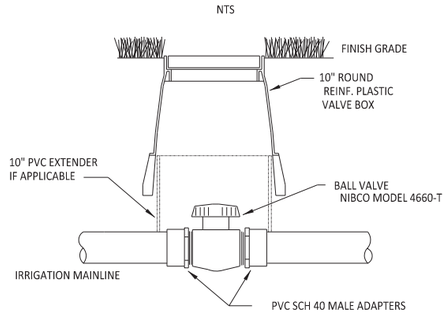
1. SLEEVE SHALL BE SCHEDULE 40 PVC.
2. DEPTH TO BE MINIMUM OF 24" BELOW PAVING SUBGRADE & MAXIMUM OF 36" BELOW PAVING SUBGRADE. IN NO CASE SHALL THE TOP OF THE SLEEVE PIPE BE GREATER THAN THREE (3') BELOW FINAL GRADE (TOP OF ASPHALT OR BACK OF CURB).
3. ENDS OF PIPE TO EXTEND 24" TO 36" BEYOND BACK OF CURB (OR BACK OF SIDEWALK IF SIDEWALK IS BUILT TO CURB).
4. ENDS OF PIPE TO BE TAPED OFF WITH DUCT TAPE.
5. CONTRACTOR SHALL STAKE BOTH ENDS OF EACH CROSSING (WITH 8', 2 X 4, TOP PAINTED PURPLE) AND ACCURATELY AS-BUILD (DIMENSION FROM FIXED OBJECTS OR STRUCTURES) IN CASE STAKES ARE REMOVED.
6. SHOULD STAKES NOT BE PRESENT WHEN IRRIGATION CONSTRUCTION BEGINS, AND NO ACCURATE AS-BUILD BE AVAILABLE, THE SLEEVE INSTALLATION CONTRACTOR SHALL BE RESPONSIBLE FOR RETURNING TO THE SITE AND EXCAVATING BOTH ENDS OF THE SLEEVES.
7. THE SLEEVE SHALL BE INSTALLED IN A STRAIGHT LINE WITH PROPOSED IRRIGATION PIPING, LEAVING NO OBSTRUCTION (I.E. UNDER DRAIN, FORCE MAIN, SEWER LINE, POWER CABLE, FOOTER, ETC.) AT EITHER END OF THE SLEEVE.

SLEEVE DETAIL



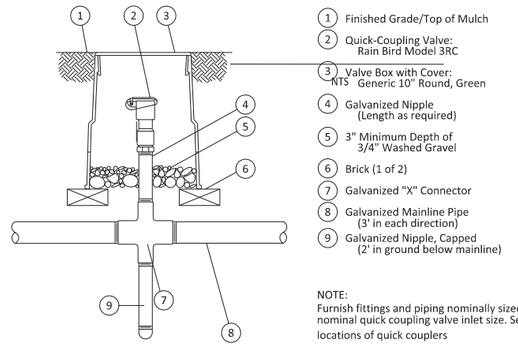
TREE BUBBLER

NTS



ISOLATION BALL VALVE

NTS



RAINBIRD QUICK COUPLER VALVE 3RC

NTS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

IRRIGATION DETAILS 3

SHEET NO. L26

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

TECHNICAL MAINTENANCE PLAN – 180 DAYS

OPERATION	180 DAY CONTRACTED MAINTENANCE WEEKLY CYCLE				CITY OF TAMPA COMMITMENT ON YEARLY CYCLE											
WEEK	1 2 3 4	5 6 7 8	9–12	13–26	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
WATERING # DAYS	7 7 7 7	4 4 4 4	2	1												
	Watering must be performed each week of the 180 day maintenance period at the frequency indicated (see chart for Water Application Rates). Saturate tree well completely & water all shrub beds.				City shall water once a week or as needed after the 180 day contracted maintenance period (during drought periods) using a City water truck if needed. Utilize the provided in–ground irrigation system as primary water method. Coordinate with central controller schedule.											
WEEDING/ LITTER PICKUP	X	X	X	X X X X	Weeding every 14 days as indicated using an approved herbicide such as "Roundup"(Glypho–sate) or equal applied at the rate of 1 1/2 oz. per gallon and applied by a licensed applicator or under the supervision of a licensed applicator. Litter pick up must be performed prior to application of herbicide.											
	Contractor shall weed and pick up litter in all planting beds and individual tree wells once in each four week period before the end of the 180 day maintenance period.															
PRUNING	As needed to mechanically remove damaged branches. Contractor shall maintain State of Florida #1 form to attain final acceptance.				Pruning shall be accomplished using chain saws, hand saws, and/or lopping shears. Shrubs shall be pruned yearly to a height appropriate to species, use and location.											
FERTILIZING	Trees, palms, shrubs and groundcovers shall be fertilized when planted per detail & specifications.				Trees, palms, shrubs and groundcovers to be fertilized annually per manufacturer's specifications.											
MOWING	Every 14 days leaving 3" in height.				Every 14 days leaving 3" in height.											
EDGING	Every 14 days by mechanical means.				Every 14 days by mechanical means.											
MULCHING	Mulch shall be applied immediately after watering of each plant. See Plant List for mulch types/depth to be used.				Restore 3" layer of mulch once a year. See Plant List for mulch types to be used.											

WATER APPLICATION RATES

(For non–irrigated areas if applicable)

Trees and Palms	Saturate to 3' depth. Flood tree well or Ooze Tube.
Shrubs	2 gallons per plant, sprayed over entire planting bed.
Groundcovers/grasses	1 gallon per plant, sprayed over entire planting bed.
Turf	Saturate turf area to 1" prepared soil depth.

NOTE:

FERTILIZER APPLICATION RATES

Trees and Palms	Fertilizer per details and manf. specifications shall be applied at time of planting and once annually.
Shrubs	Fertilizer per details and manf. specifications shall be applied at time of planting and once annually.
Groundcovers/Grasses	Fertilizer per details and manf. specifications shall be applied at time of planting and once annually.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TERRA TECTONICS DESIGN GROUP, INC.
Landscape Architects
ISA Certified Arborists
Corporate Authorization # 254
Jonathan H. Toner
Landscape Architect
Florida LIC #0001123
1188 Kapp Drive | Clearwater, Florida | 33765 | 727.441.4504

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TECHNICAL MAINTENANCE PLAN

SHEET NO. L27

$USER$ $DATE$ $TIME$ $MODELNAME$ $FILE$

STATE OF FLORIDA

CITY OF TAMPA

WALK-BIKE LAP PROJECT

FINANCIAL PROJECT ID 437246-1-58-01

CITY PROJECT NO. 1001220

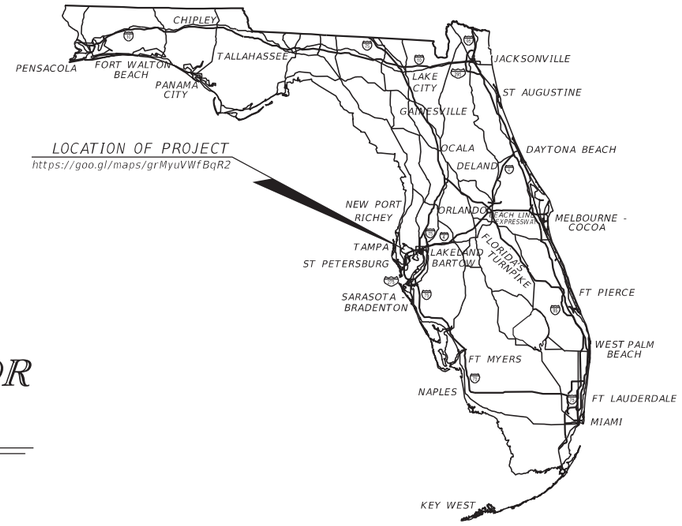
HILLSBOROUGH COUNTY

46TH STREET FROM SR 580 (BUSCH BLVD) TO SR 582 (FOWLER AVE)

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
U-1	KEY SHEET
U-2	TABULATION OF QUANTITIES
U-3	GENERAL NOTES
U-4 - U-8	WATER MAIN PLAN-PROFILE SHEETS
U-9 - U-14	WATER MAIN DRAINAGE STRUCTURE DETAILS
U-15	WATER MAIN CROSS SECTIONS
U-16 - U-23	WATER MAIN STANDARD DETAILS

UTILITY WORK BY HIGHWAY CONTRACTOR
WATER RELOCATION PLANS



CHRISTOPHER K. MARTIN
LICENSE
No 66598
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Christopher K Martin

Digitally signed by Christopher K Martin
DN: c=US, o=AYRES ASSOCIATES, ou=A01427D00000168E77E6FA1000063 AD, cn=Christopher K Martin
Date: 2020.04.27 08:49:54 -04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONSTRUCTION PLANS
MARCH 2020

ROADWAY PLANS
ENGINEER OF RECORD:

CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
(813) 978-8688
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA PROJECT MANAGER:

NINA MABILLEAU, E.I.

FISCAL YEAR	SHEET NO.
21	U-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

CITY OF TAMPA
CIP NO.: 1001220 / FPID: 437246-1-58-01

SUMMARY OF UTILITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
1050- 51-202	UTILITY PIPE-DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 2"	LF	15
1050- 51-206	UTILITY PIPE-DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 6"	LF	73
1050- 51-208	UTILITY PIPE-DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 8"	LF	976
1050- 51-212	UTILITY PIPE-DUCTILE IRON/CAST IRON,, FURNISH & INSTALL, WATER/SEWER, 12"	LF	41
1050- 61-116	UTILITY PIPE-STEEL, FURNISH & INSTALL, CASING, 16"	LF	20
1055- 51-108	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL ELBOW, 8"	EA	10
1055- 51-112	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL ELBOW, 12"	EA	4
1055- 51-208	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL TEE, 8"	EA	6
1055- 51-308	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL REDUCER, 8"	EA	1
1055- 51-408	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL UNION, 8"	EA	1
1080- 24-106	UTILITY FIXTURE, VALVE ASSEMBLY, FURNISH AND INSTALL, 6"	EA	1
1080- 24-108	UTILITY FIXTURE, VALVE ASSEMBLY, FURNISH AND INSTALL, 8"	EA	11
1080- 27-106	UTILITY FIXTURE-LINE STOP ASSEMBLY, FURNISH AND INSTALL, 6"	EA	1
1080- 27-108	UTILITY FIXTURE-LINE STOP ASSEMBLY, FURNISH AND INSTALL, 8"	EA	7
1080- 29-106	UTILITY FIXTURE-MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 6"	EA	4
1080- 29-108	UTILITY FIXTURE-MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 8"	EA	49
1080- 29-112	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 12"	EA	2
1080-32-106	UTILITY FIXTURE-SAMPLE POINT, FURNISH & INSTALL, 6"	EA	1
1080-32-108	UTILITY FIXTURE-SAMPLE POINT, FURNISH & INSTALL, 8"	EA	6
1644-113-08	FIRE HYDRANT , F&I, STANDARD, 2 HOSE, 1 PUMPER, 6"	EA	3
1644-900	FIRE HYDRANT, REMOVE	EA	3

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

TABULATION OF QUANTITIES

SHEET NO.
U-2

CITY OF TAMPA WATER DEPARTMENT NOTES

GENERAL

A. WATER SERVICE SHALL BE PROVIDED BY THE CITY OF TAMPA.
B. ALL WORK TO BE PERFORMED ON EXISTING OR ON FUTURE WATER FACILITIES TO BE OWNED AND MAINTAINED BY THE CITY OF TAMPA SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF CITY OF TAMPA WATER DEPARTMENT TECHNICAL MANUAL. ALL CONSTRUCTION DETAILS AND STANDARDS DESCRIBED THERE WITHIN SHALL BE CONSIDERED TO BE PART OF THE CONTRACT DOCUMENTS FOR THIS PROJECT.
C. CONSTRUCTION OF ANY WATER INSTALLATIONS TO BE OWNED AND MAINTAINED BY THE CITY OF TAMPA SHALL BE COORDINATED WITH THE CITY OF TAMPA CONTRACT ADMINISTRATION DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. THE ENGINEER OF RECORD AND / OR CONTRACTOR SHALL CONTACT THE ADMINISTRATION DEPARTMENT AT (813) 635-3400 TO SCHEDULE A PRE-CONSTRUCTION MEETING FOR THE REVIEW OF INSTALLATION TECHNIQUES AND PROCEDURES A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO CONSTRUCTION.
D. PRIOR TO THE PRE-CONSTRUCTION MEETING WITH THE CITY OF TAMPA REGARDING THE PUBLIC WATER FACILITIES, THE CONTRACTOR SHALL OBTAIN THE LATEST EDITION OF THE CITY OF TAMPA WATER DEPARTMENT TECHNICAL MANUAL. ALL PRIVATELY INSTALLED PUBLIC FACILITIES, INCLUDING CONSTRUCTION, MATERIALS, AND WORKMANSHIP, ARE TO CONFORM WITH THE SPECIFICATIONS OUTLINED IN THE DEPARTMENT'S TECHNICAL MANUAL. IN THE EVENT OF A DISCREPANCY, THE MOST STRINGENT CRITERIA SHALL APPLY.
E. BENDS SHALL BE INSTALLED ON ALL WATER MAINS AS NECESSARY TO MAINTAIN PROPER ALIGNMENT. JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH AWWA C-600 (LATEST EDITION) EXCEPT DEFLECTIONS ALLOWED SHALL BE LESS 80% OF THE DEFLECTION VALUES GIVEN IN THE AWWA DEFLECTION TABLE.
F. VALVES ON EXISTING CITY OF TAMPA WATER MAINS ARE TO BE OPERATED BY CITY PERSONNEL ONLY.
G. FIRE HYDRANT ASSEMBLIES TO BE OWNED AND MAINTAINED BY THE CITY SHALL BE 5 ¼" DNS.
H. ALL FIRE HYDRANT ASSEMBLIES AND FIRE LINE DOUBLE DETECTOR CHECK VALVES WHICH ARE TO BE PRIVATELY OWNED AND MAINTAINED SHALL BE PAINTED RED.
I. FOR ANY NEW, ADJUSTED, OR RELOCATED FIRE HYDRANT ASSEMBLY, HYDRANT EXTENSIONS ARE NOT PERMITTED. FIRE HYDRANT ASSEMBLY INSTALLATIONS MUST CONFIRM WITH THE WATER DEPARTMENT STANDARD. IF A NEW, ADJUSTED, OR RELOCATED FIRE HYDRANT ASSEMBLY IS NOT PROPERLY SIZED, A NEW HYDRANT MUST BE ORDERED AT THE DEVELOPER'S EXPENSE.
J. THE DEVELOPER SHALL BE RESPONSIBLE TO LOCATE ALL EXISTING PUBLIC WATER SERVICE LINES NO LONGER TO BE SERVING THE PARCEL. THESE SERVICE LINES ARE TO BE REMOVED, AND CUT & CAPPED AT THE PUBLIC WATER MAIN BY THE DEVELOPER.

PIPE CLEARANCES

A. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES AND SHALL MAINTAIN A MINIMUM OF THREE (3) FEET HORIZONTAL SEPARATION FROM OTHER UTILITIES, EXCEPT STORM, WASTEWATER, AND GAS WHICH SHALL MAINTAIN TEN (10) FEET HORIZONTAL SEPARATION, UNLESS OTHERWISE NOTED.
B. WATER MAINS SHALL CROSS ABOVE OTHER PIPES. WHEN WATER MAINS CROSS ANOTHER UTILITY, 18" OF OUTSIDE-TO-OUTSIDE VERTICAL SEPARATIONS SHOULD BE PROVIDED. IN CASES WHERE THE PREFERRED SEPARATION MAY NOT BE MET, A MINIMUM OF 12" OF OUTSIDE-TO-OUTSIDE VERTICAL SEPARATION MUST BE PROVIDED.
C. ALL WATER MAIN CROSSINGS WILL OTHER UTILITIES SHALL BE ARRANGED SO THAT THE JOINTS OF THE CROSSING PIPES ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).
D. CLEARANCE BETWEEN ALL TREES AND WATER MAINS SHALL MEET CITY OF TAMPA PARKS DEPARTMENT LATEST REQUIREMENTS. NO TREE SHALL BE PLANTED WITHIN 10 FEET OF INSTALLED OR EXISTING WATER MAINS.

MATERIAL

A. ALL VALVES SHALL BE RIGHT HAND (CLOCKWISE) OPEN.
B. ALL DUCTILE IRON PIPE (DIP) FITTINGS AND APPURTENANCES SHALL UTILIZE POLYWRAP.
C. ALL HARDWARE SHALL BE, AT MINIMUM, 304 STAINLESS STEEL, UNLESS OTHERWISE NOTED.
D. ALL BELOW GROUND BENDS SHALL BE MECHANICAL JOINT.
E. ALL VALVES AND FITTINGS SHALL BE RESTRAINED.
F. CONCRETE THRUST BLOCKS SHALL NOT BE USED TO PROVIDE THRUST RESTRAINT. RESTRAINT OF PUSH-ON DIP (OTHER THAN FOR FITTINGS AND VALVES) SHALL BE WITH APPROVED PUSH-ON "GRIPPER-TYPE" RESTRAINTS. FITTINGS AND VALVES SHALL BE CONNECTED TO PIPE WITH MEGA LUGS, OR APPROVED EQUAL.
G. ALL POTABLE WATER SERVICE LATERALS, AIR RELEASE VALVES, AND TEMPORARY SAMPLE POINTS SHALL BE CONSTRUCTED OF BLUE SDR-9 HIGH DENSITY POLYETHYLENE (HDPE) TUBING. ALL HDPE TUBING SHALL BE INSTALLED WITHIN A CASING AS DEFINED IN THE SPECIFICATIONS AND DETAILS OF THE CITY OF TAMPA WATER DEPARTMENT TECHNICAL MANUAL.

DIRECTIONAL DRILLING

A. HORIZONTAL ALIGNMENT SHALL BE AS SHOWN ON THE DRAWINGS. THE PIPE SHALL HAVE A MINIMUM 48-INCH COVER. THE MAXIMUM DEPTH SHALL BE DETEMINED BASED ON 36-INCH MINIMUM CLEARANCE UNDER WATER OR GAS LINES AND 24-INCH CLEARANCE UNDER ALL OTHER EXISTING OR PROPOSED UTILITIES TO BE CROSSED. COMPOUND CURVATURES MAY BE USED, BUT SHALL NOT EXCEED THE MAXIMUM DE?ECTIONS AS SET FORTH BY THE HDPE PIPE MANUFACTURE OR AWWA STANDARDS, WHICHEVER IS STRICTER.
B. ENTRY ANGLE SHALL BE 12° - 14° IDEAL (NOT TO EXCEED 15°). EXIT ANGLE SHALL BE 6° - 12° TO FACILITATE "PULL-BACK."
C. ENTRY AND EXIST ANGLES ARE DE?NED AS ANGLES FROM THE HORIZONTAL.
D. A BORING LOG FOR THE VERTICAL AND HORIZONTAL ALIGNMENTS OF THE DIRECTIONAL DRILLED PIPES SHALL BE PROVIDED AND SUBMITTED ALONG WITH THE AS BUILT PACKAGE.

TESTING

A. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL BE PROPERLY PRESSURE TESTED, WITNESSED, AND ACCEPTED BY THE CITY. PRESSURE TEST TO BE PERFORMED IN ACCORDANCE WITH CITY OF TAMPA WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY THE ASSIGNED CITY INSPECTOR A MINIMUM OF THREE (3) WORKING DAYS IN ADVANCE OF PERFORMING TESTS. CONTRACTOR SHALL PRESSURE TEST WATER MAINS AT A MINIMUM OF 150 PSI FOR A PERIOD OF TWO (2) HOURS IN ACCORDANCE WITH AWWA C600-87 STANDARDS. THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS AND ARRANGEMENTS.

CITY OF TAMPA WATER DEPARTMENT NOTES (CONT'D.)

TESTING (CONT'D.)

B. ALL SAMPLE, PRESSURE TEST, AND CHLORINATION POINT PIPING SHALL BE COMPLETELY REMOVED PRIOR TO FINAL ACCEPTANCE. THE CORPORATION STOP SHALL BE CLOSED AND PLUGGED AT THE MAIN.
C. CONTRACTOR SHALL PERFORM DISINFECTION AND HIRE INDEPENDENT FIRMS TO CONDUCT BACTERIOLOGICAL TESTING AS DEFINED IN F.A.C. 62-55.340. CONTRACTOR SHALL SUPPLY THE CITY WITH AS-BUILTS AND SAMPLE RESULTS NECESSARY TO OBTAIN DEP CLEARANCES.

RESTORATION

A. ROADWAY RESTORATION SHALL BE IN CONFORMANCE WITH CORRESPONDING JURISDICTIONS LATEST'S STANDARDS. 2. ALL ASPHALT OPEN CUTS WITHIN CITY RIGHT-OF-WAY SHALL BE FULLY MILLED AND OVERLAYED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT PER THE WATER DEPARTMENT'S STANDARD DETAIL.
B. DISTURBANCE TO ANY PROPERTY, PUBLIC OR PRIVATE, AS PART OF THE CONSTRUCTION OF PUBLIC WATER FACILITIES, SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

CERTIFICATE OF OCCUPANCY

THE CITY OF TAMPA WATER DEPARTMENT'S HOLD ON THE CERTI?CATE OF OCCUPANCY WILL NOT BE RELEASED UNTIL ALL CLOSEOUT REQUIREMENTS SET FORTH BY CITY OF TAMPA WATER DEPARTMENT AND CONTRACT ADMINISTRATION HAVE BEEN SATISFIED. THESE REQUIREMENTS MAY INCLUDE BY NOT BE LIMITED TO:

A. FINAL INSPECTION IN CONJUNCTION WITH THE CONTRACT ADMINISTRATION DEPARTMENT PERSONNEL COMPLETED AND APPROVED.
B. AS-BUILTS, BOTH HARD COPIES AND PDF, HAVE BEEN RECEIVED AND ACCEPTED.
C. ALL NECESSARY TESTING COMPLETED AND CERTIFIED.
D. PAYMENT OF ALL CITY OF TAMPA WATER DEPARTMENT FEES.
E. ISSUANCE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION / HILLSBOROUGH COUNTY HEALTH DEPARTMENT CERTI?CATION OF COMPLETION APPROVAL (IF APPLICABLE).
F. RECEIPT AND ACCEPTANCE OF ALL REQUIRED EASEMENT DEDICATION DOCUMENTS (IF APPLICABLE).
G. RECEIPT AND ACCEPTANCE OF ALL REQUIRED TRANSFER OF OWNERSHIP DOCUMENTS (IF APPLICABLE).

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

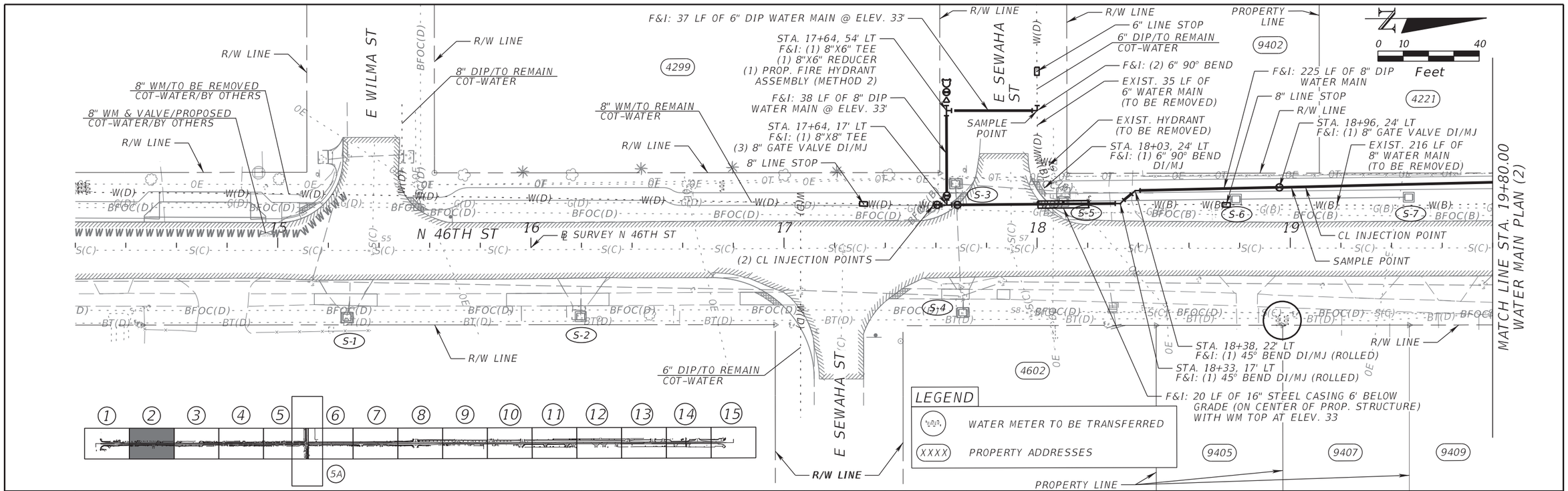
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

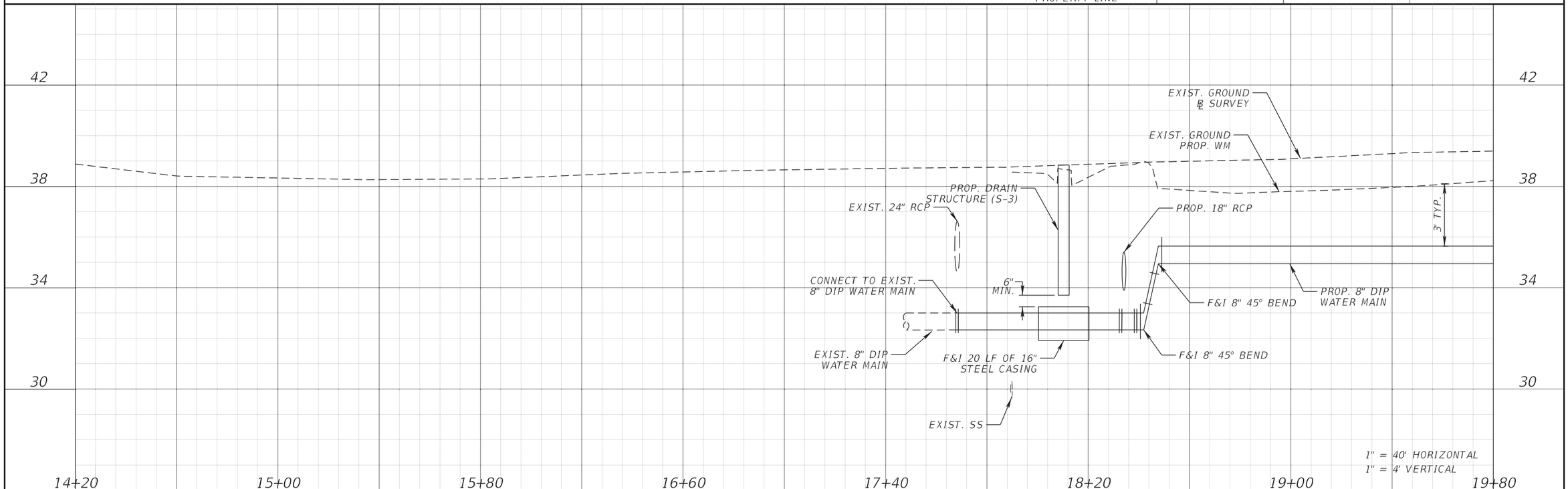
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

GENERAL NOTES

SHEET NO. U-3





REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN PLAN-PROFILE (1)

SHEET NO. U-4

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MATCH LINE STA. 14+20.00
WATER MAIN PLAN (1)

MATCH LINE STA. 25+40.00
WATER MAIN PLAN (3)

E RICHMERE ST

E TEMPLE HEIGHTS RD

N 46TH ST

℄ SURVEY N 46TH ST

R/W LINE

PROPERTY LINE

4221 4222 4223 9602 9606 9409 9501 9507 9511 4602 9605 9607

8" WM/TO REMAIN
COT-WATER

8" LINE STOP

F&I: 17 LF OF 8" DIP WATER MAIN

STA. 20+22, 40' LT
F&I: (1) 8" 45° BEND DI/MJ
STA. 20+18, 37' LT
F&I:(1) 8" 45° BEND DI/MJ

STA. 20+18, 27' LT
F&I: (1) 8"X8" TEE
(3) 8" GATE VALVE DI/MJ

STA. 20+47, 27' LT
F&I: (1) 8" 45° BEND DI/MJ

STA. 20+57, 17' LT
F&I: (1) 8" 45° BEND DI/MJ

EXIST. 560 LF OF 8" WATER MAIN (TO BE REMOVED)

F&I: 564 LF OF 8" DIP WATER MAIN

8" DIP/TO REMAIN
COT-WATER

STA. 22+92, 17' LT
F&I: (1) 8"X8" TEE
(2) 8" GATE VALVE DI/MJ
(1) 8" 45° BEND

STA. 23+05, 31' LT
F&I: (1) 8" 45° BEND DI/MJ
STA. 23+09, 28' LT
F&I:(1) 8" 45° BEND DI/MJ

F&I: 15 LF OF 8" DIP WATER MAIN

STA. 23+09, 17' LT
F&I: (1) 8"X8" TEE
(1) GATE VALVE DI/MJ

STA. 23+80, 19' LT
F&I: (1) 8" GATE VALVE DI/MJ

S-8 S-9 S-10 S-11 S-12 S-13 S-14

20 21 22 23 24 25

CL INJECTION POINT
SAMPLE POINT
8" LINE STOP

F&I: 22 LF OF 8" DIP WATER MAIN

STA. 23+01, 1' RT
F&I: (1) 8" 45° BEND DI/MJ

0 10 40
Feet

LEGEND

WATER METER TO BE TRANSFERRED

XXXX PROPERTY ADDRESSES

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

NOTE: MAX DEFLECTION SHALL NOT EXCEED 2°

46 42 38 34

BEGIN DEFLECTION
END DEFLECTION

EXIST. BFO
EXIST. 18" RCP
EXIST. WM (TO BE REMOVED)
EXIST. BFO
EXIST. SS

EXIST. GROUND ℄ SURVEY
EXIST. GROUND PROP. WM

12" (MIN.)
3' TYP.

PROP. 8" DIP WATER MAIN
PROP. 18" RCP
EXIST. SS

19+80 20+60 21+40 22+20 23+00 23+80 24+60 25+40

1" = 40' HORIZONTAL
1" = 4' VERTICAL

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

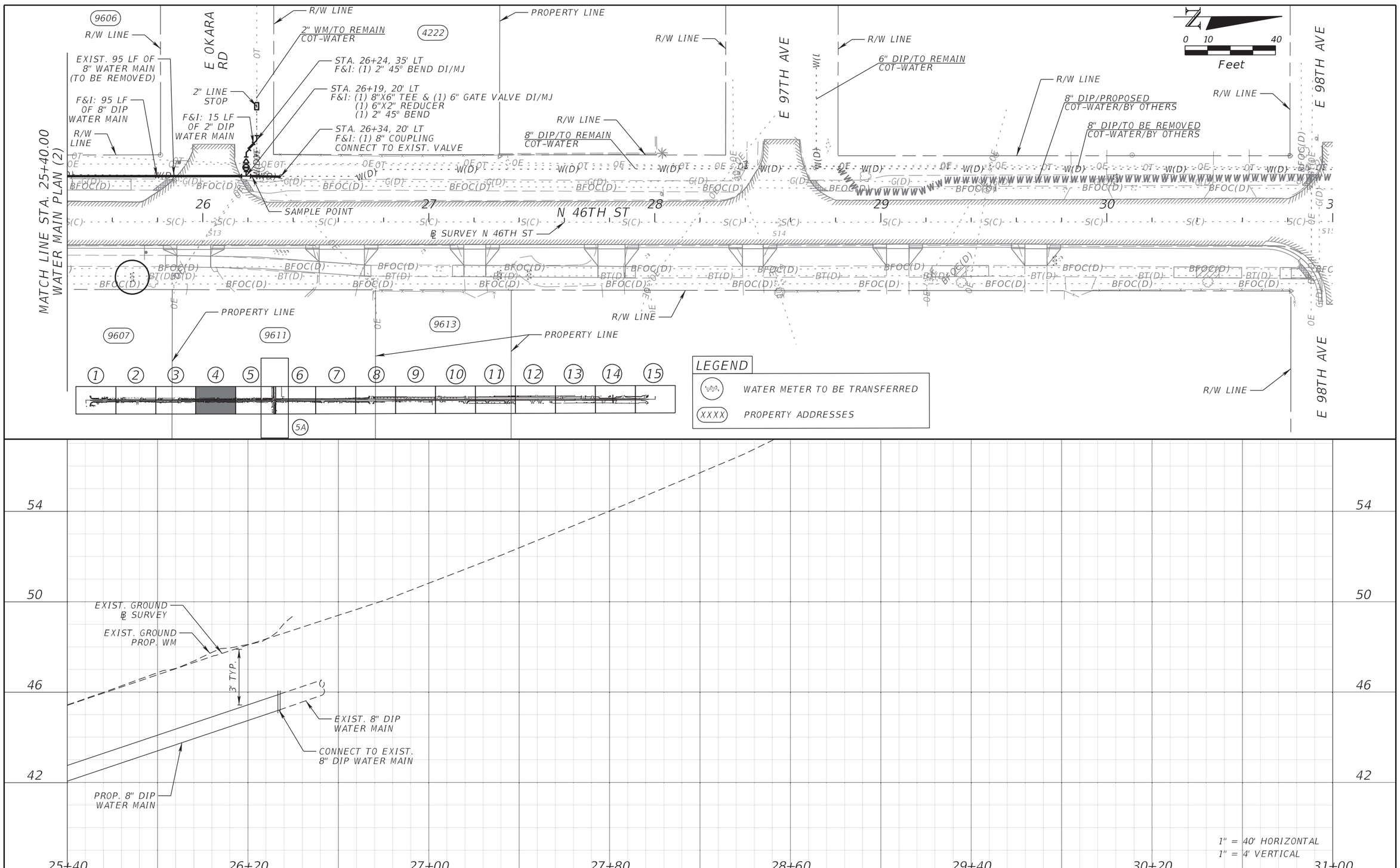
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN PLAN-PROFILE (2)

SHEET NO. U-5



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

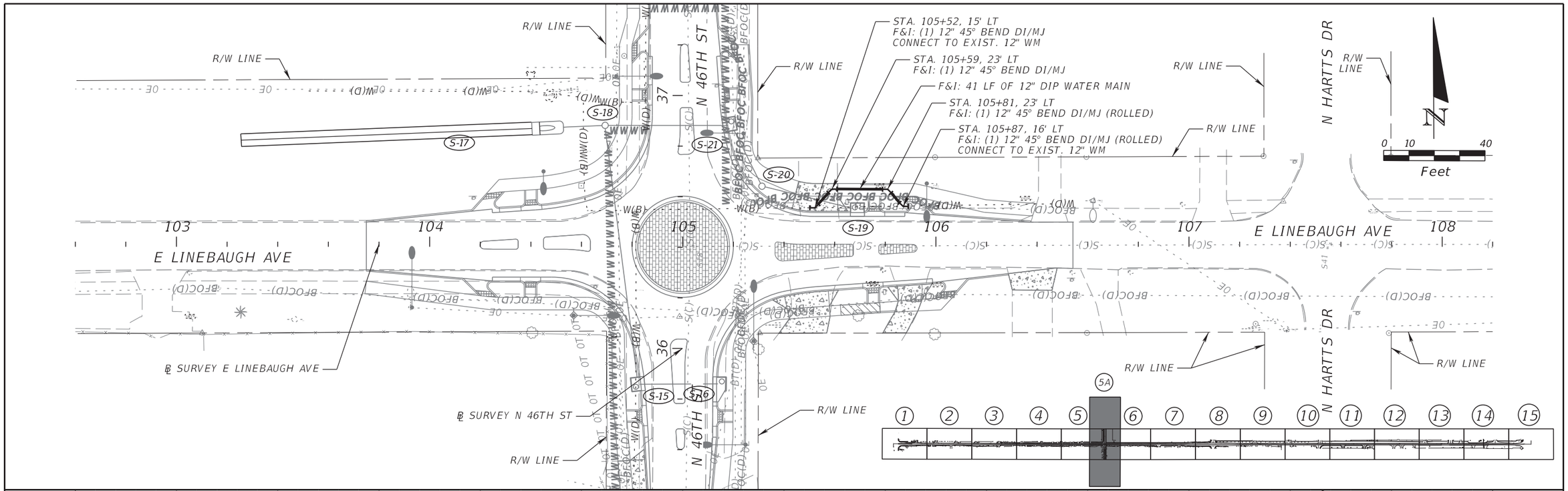
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

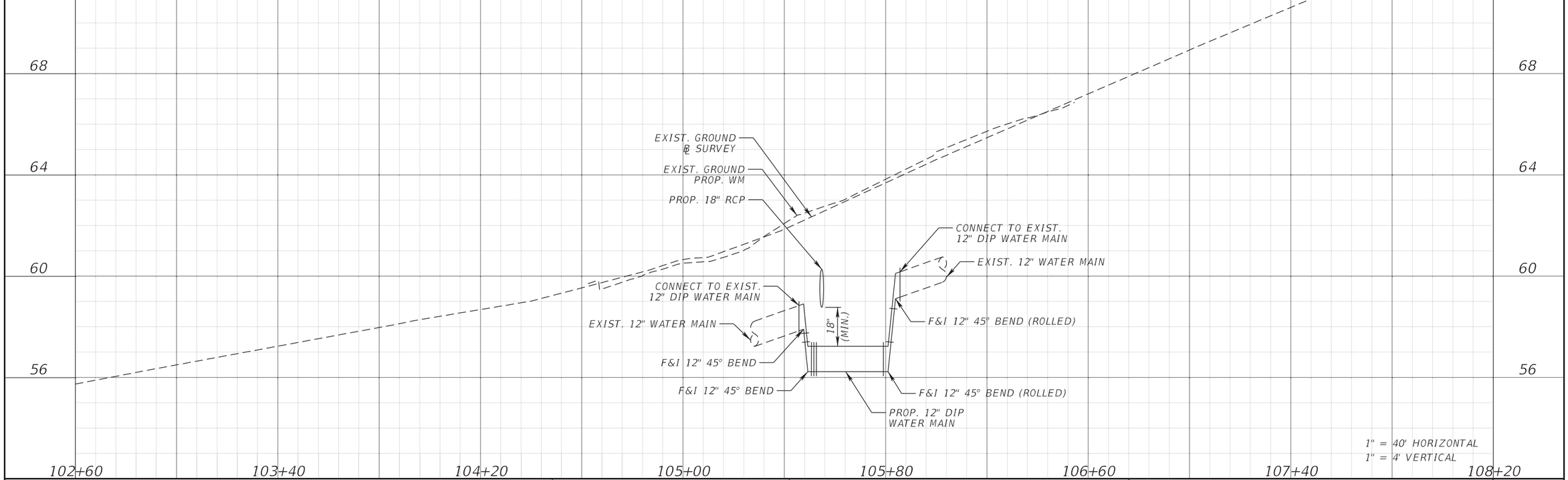
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN PLAN-PROFILE (3)

SHEET NO. U-6





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

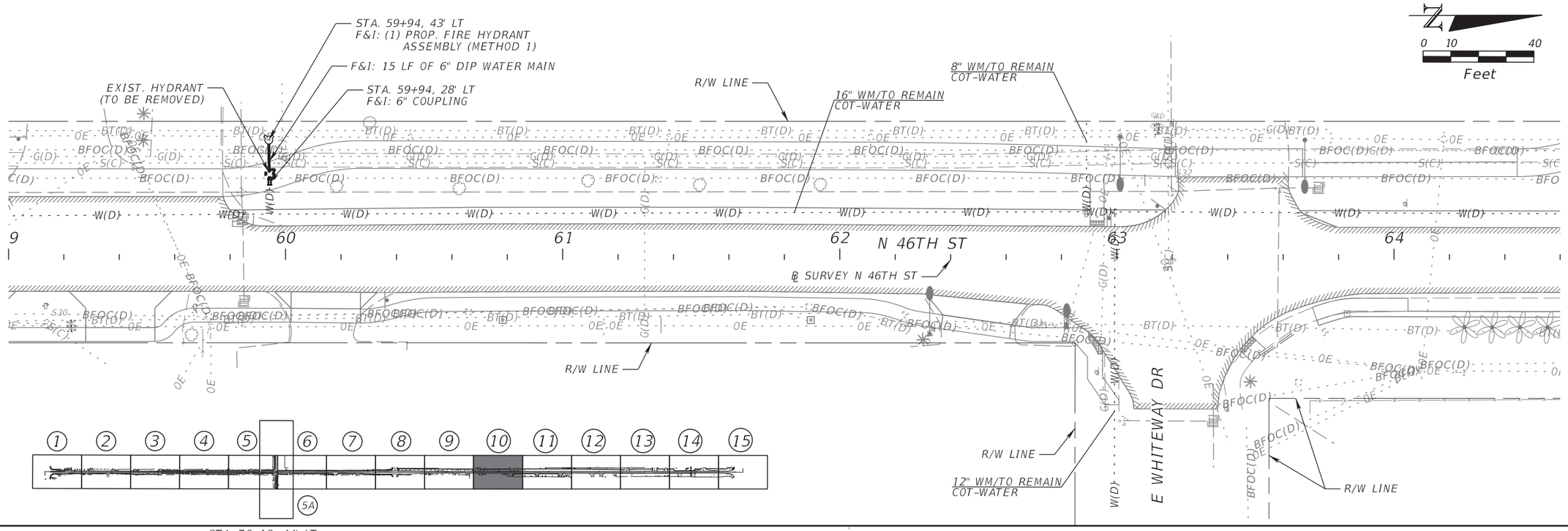
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN PLAN-PROFILE (4)

SHEET NO. U-7



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN PLAN (5)

SHEET NO. U-8

REMOVE (N) 15" PIPE & MES
REPLACE WITH 18" PIPE

BL SURVEY 46TH ST.

S-5

STA. 18+10.32, 18.27' LT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET W/
J BOTTOM (4'X8')
RIM = 38.30'
(N) 18" INV = 35.36'
(S) 18" INV = 35.26'

FROM S-6

18" RCP PIPE

1:14

7.5

38.84

R/W LINE

WM

CONST. CONC. JACKET

WM

18" RCP PIPE

TO S-3

EXIST. 18" PIPE

18+10.32 S-5 ST-19

42
40
38
36
34
32
30

S-3

STA. 17+67.76, 25.30' LT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET
RIM = 37.50'
(N) 18" INV = 34.16'
(E) 24" INV = 34.28'

FROM S-5

EXIST. 18" PIPE

CONST. CONC. JACKET

18" RCP PIPE

1:100

1:3

WM

EX. 24" PIPE

CONST. CONC. JACKET

24" RCP PIPE

1:8

R/W LINE

15" RCP PIPE

S-4

STA. 17+70.64, 25.58' RT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET
RIM = 37.50'
(W) 15" INV = 35.00'

S-4 ST-17
17+67.76
17+70.64
ST-16
S-3 ST-15

42
40
38
36
34
32
30
28

BL SURVEY 46TH ST.

SCALE
1" = 10' HORIZONTAL
1" = 5' VERTICAL

70 60 50 40 30 20 10 0 10 20 30 40 50

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

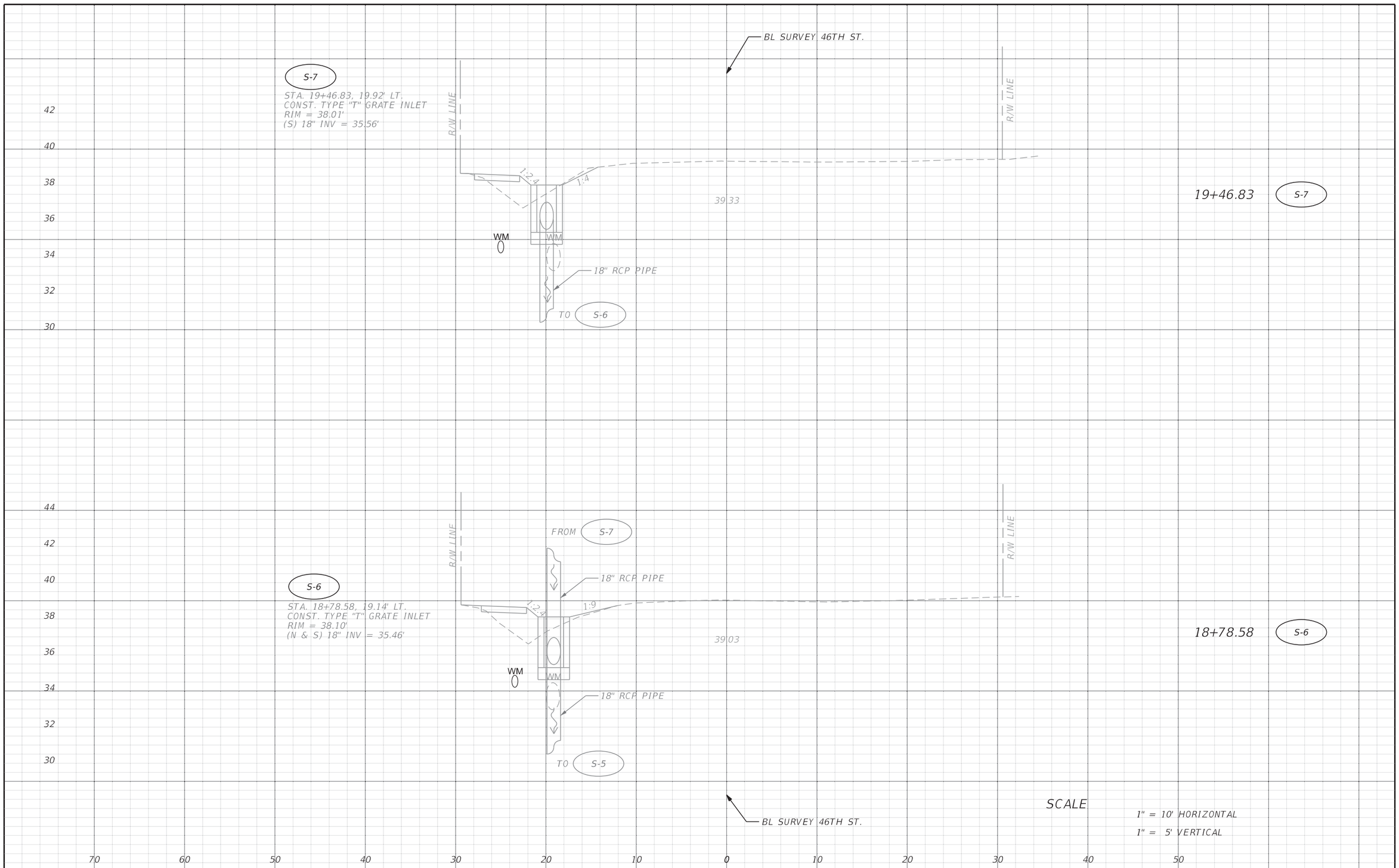
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY CONTRACT NO.	COUNTY	FINANCIAL PROJECT ID
18-D-00007	HILLSBOROUGH	437246-1-58-01

WATER MAIN DRAINAGE STRUCTURE DETAILS (1)

SHEET NO. U-9



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

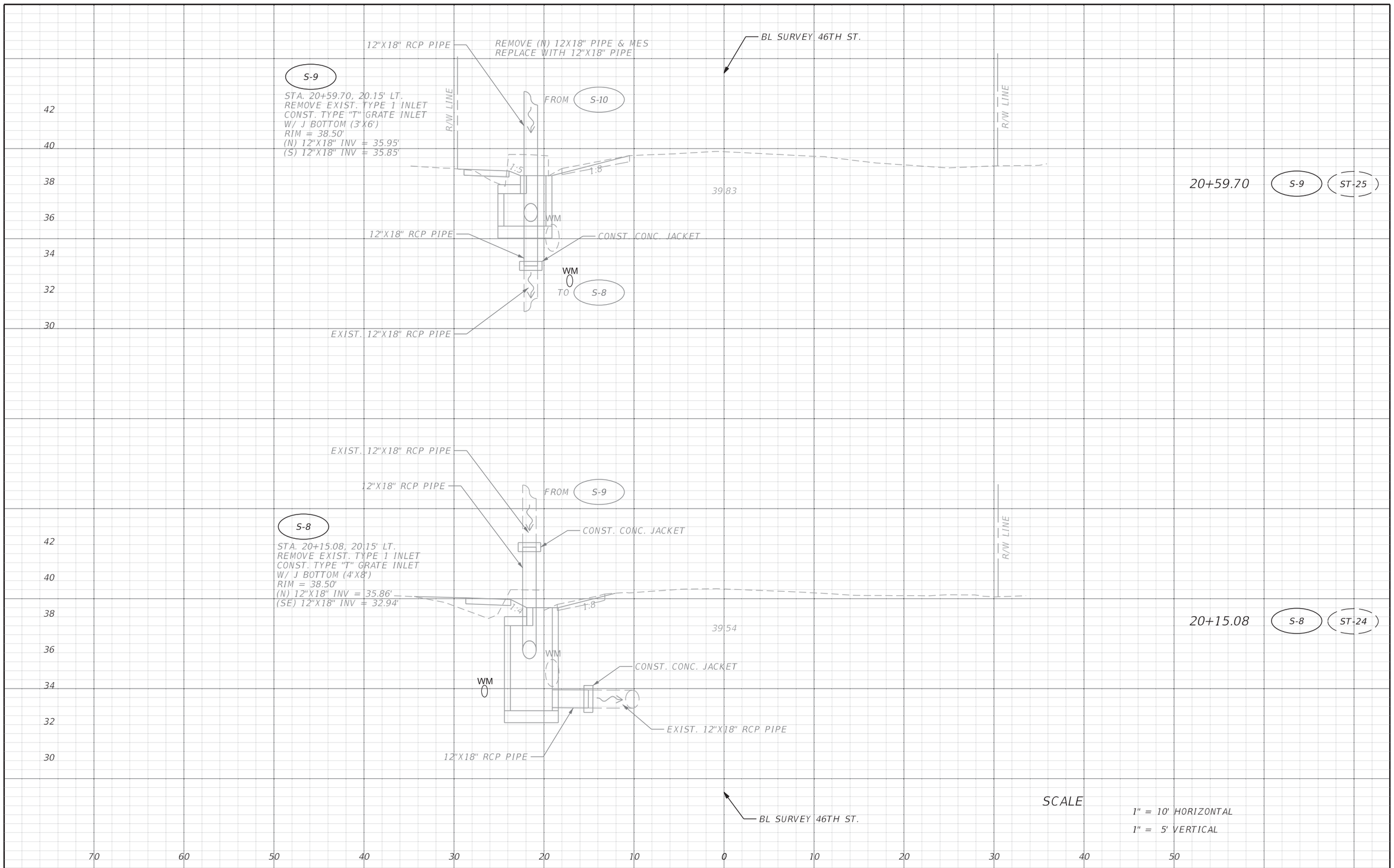
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY CONTRACT NO.	COUNTY	FINANCIAL PROJECT ID
18-D-00007	HILLSBOROUGH	437246-1-58-01

WATER MAIN DRAINAGE STRUCTURE DETAILS (2)

SHEET NO.
U-10



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

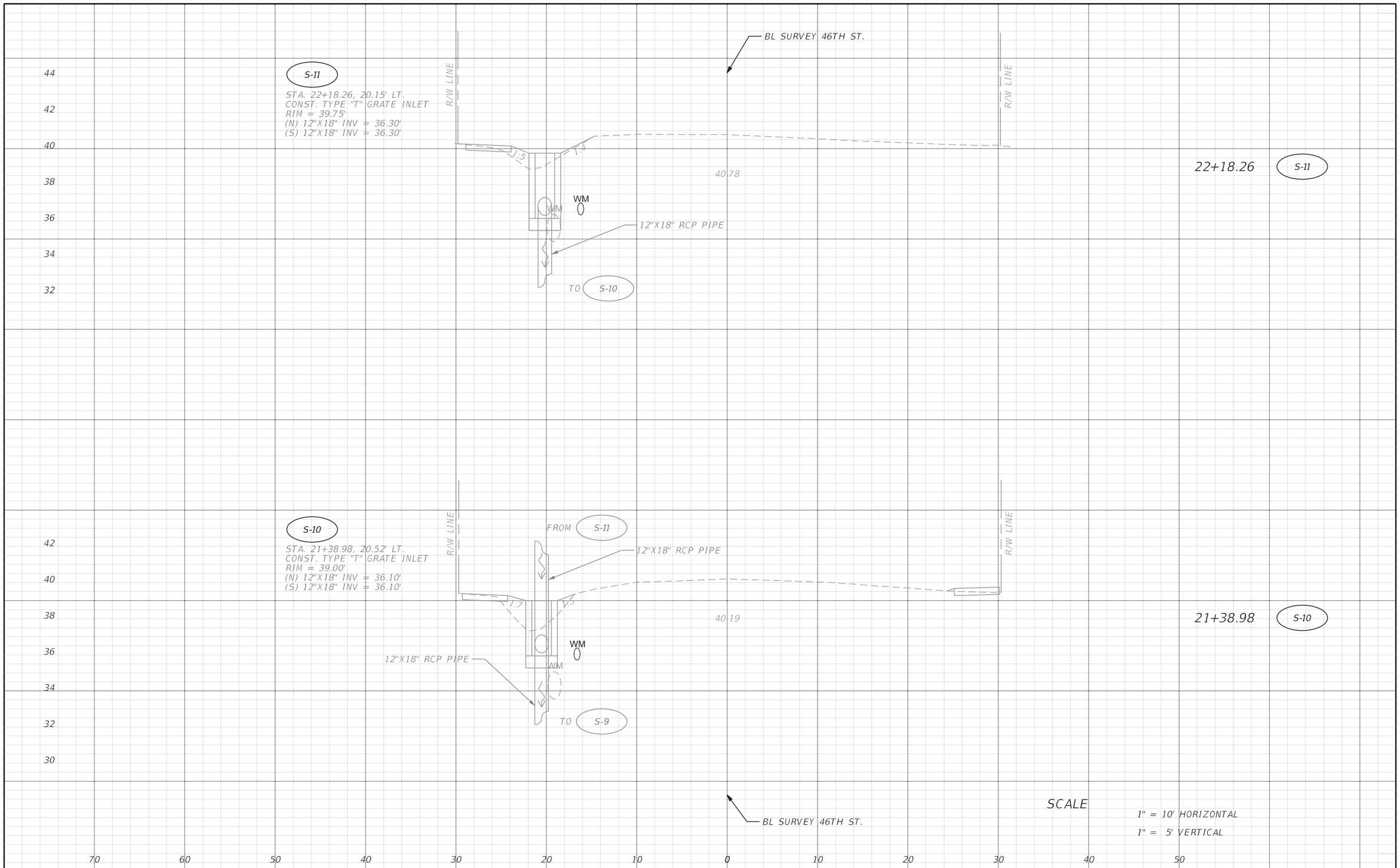
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY CONTRACT NO.	COUNTY	FINANCIAL PROJECT ID
18-D-00007	HILLSBOROUGH	437246-1-58-01

WATER MAIN DRAINAGE STRUCTURE DETAILS (3)

SHEET NO. U-11



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY CONTRACT NO.	COUNTY	FINANCIAL PROJECT ID
18-D-00007	HILLSBOROUGH	437246-1-58-01

WATER MAIN DRAINAGE STRUCTURE DETAILS (4)

SHEET NO.
U-12

BL SURVEY 46TH ST.

S-13

STA. 23+40.43, 21.46' RT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET
W/ J-BOTTOM (4'X6')
RIM = 41.00'
(S) 19"X30" INV = 36.06'

23+40.43 S-13 ST-35

44
42
40
38
36
34
32

41.76

1:17

1:3

WM

EXIST. 19"X30" RCP PIPE

19"X30" RCP PIPE

TO ST-32

FROM S-14

EXIST. 12"X18" RCP PIPE

FROM S-13

S-12

STA. 22+97.54, 19.81' LT.
REMOVE EXIST. TYPE 1 INLET
CONST. TYPE "T" GRATE INLET
W/ J-BOTTOM (4'X6')
RIM = 40.50'
(N) 12"X18" INV = 35.85'
(NE) 12"X18" INV = 35.86'

12"X18" RCP PIPE

EXIST. 19"X30" RCP PIPE

1:3

1:7

ST-32

22+97.54 S-12 ST-33 ST-32

41.47

12"X18" RCP PIPE

WM

WM

WM

EXIST. 36" RCP PIPE

CONST. CONC. JACKET

EXIST. 12"X18" RCP PIPE

EXIST. 48" RCP PIPE

SCALE

1" = 10' HORIZONTAL
1" = 5' VERTICAL

BL SURVEY 46TH ST.

70 60 50 40 30 20 10 0 10 20 30 40 50

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

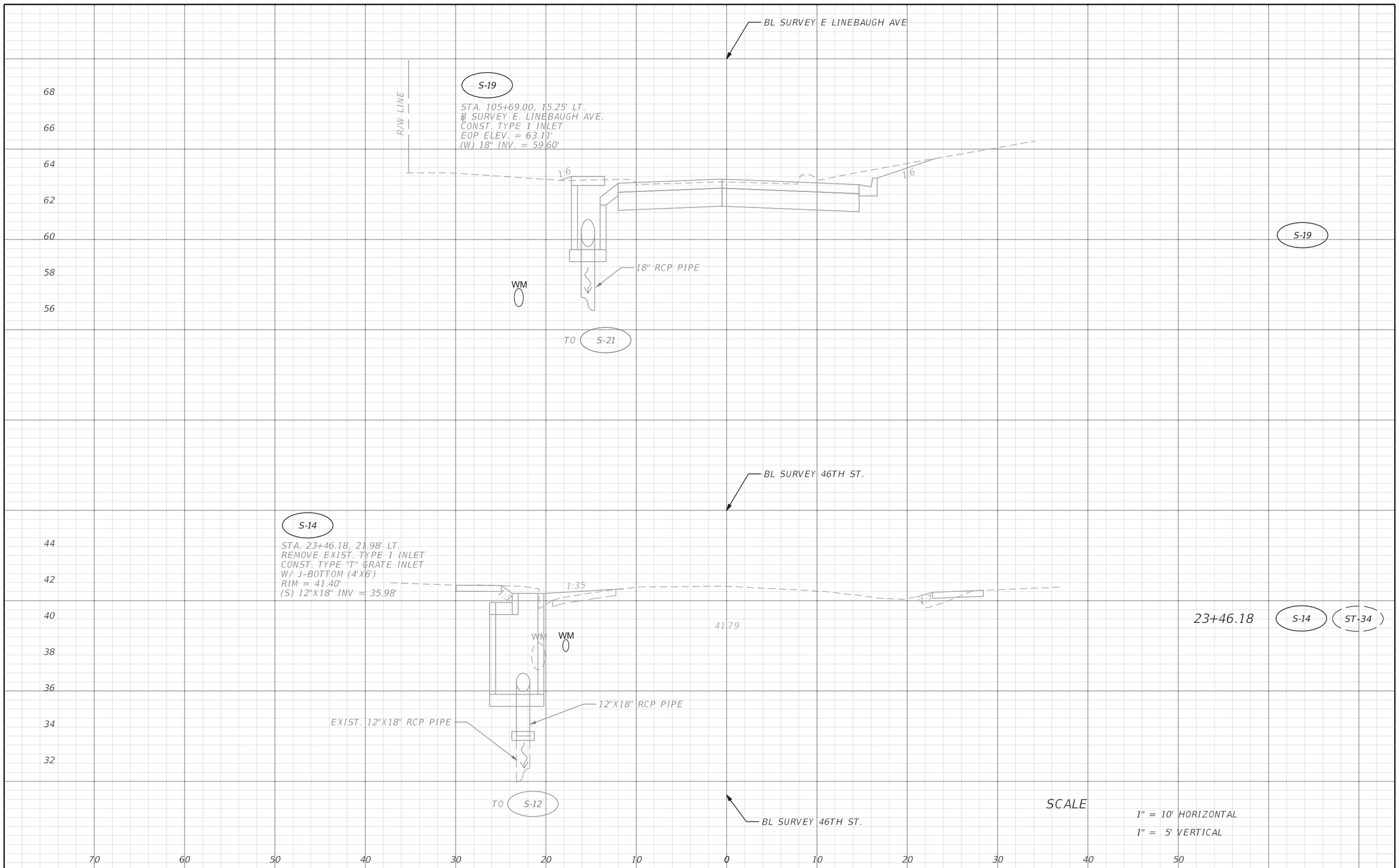
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY CONTRACT NO.	COUNTY	FINANCIAL PROJECT ID
18-D-00007	HILLSBOROUGH	437246-1-58-01

WATER MAIN DRAINAGE STRUCTURE DETAILS (5)

SHEET NO. U-13



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

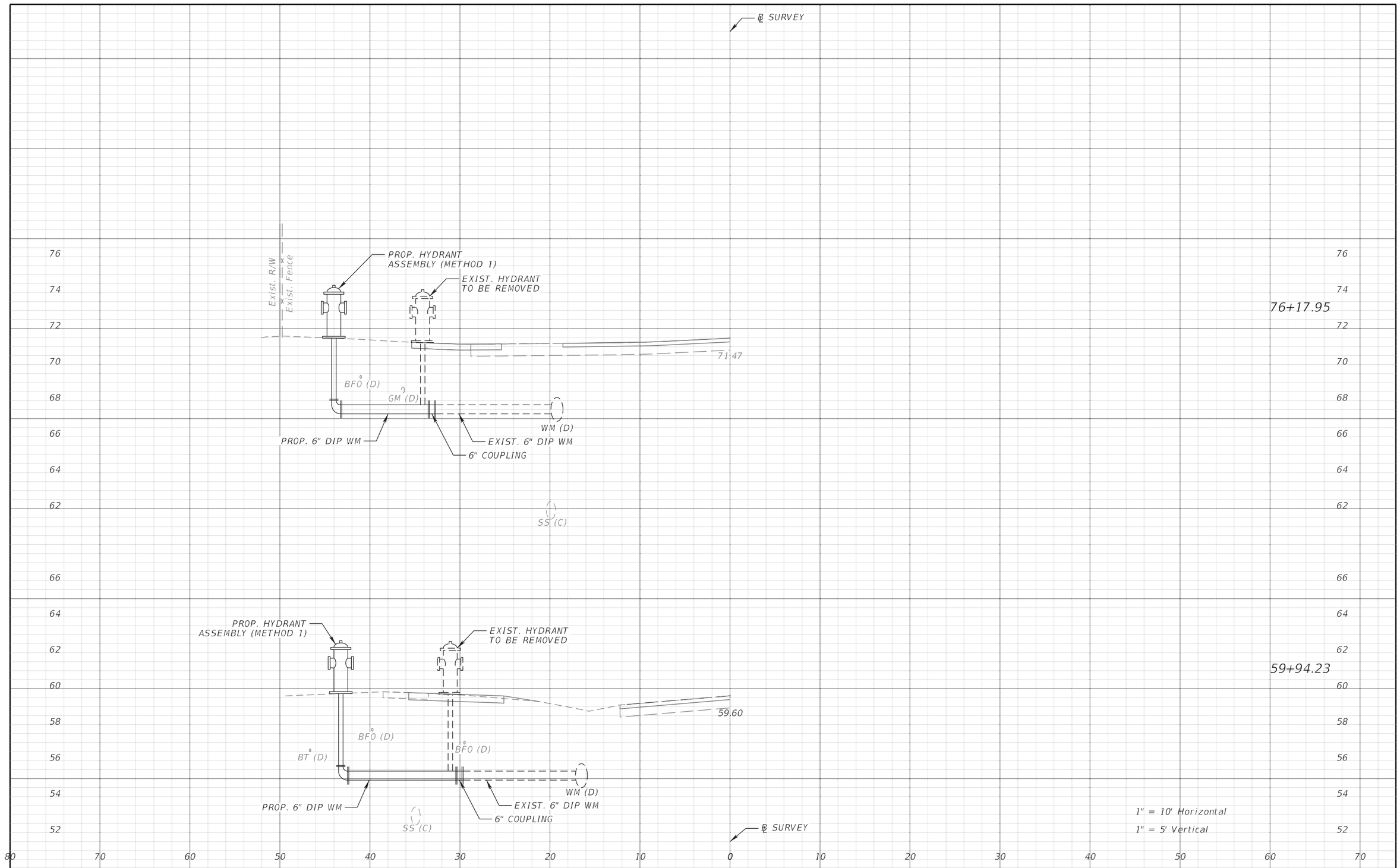
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY CONTRACT NO.	COUNTY	FINANCIAL PROJECT ID
18-D-00007	HILLSBOROUGH	437246-1-58-01

WATER MAIN DRAINAGE STRUCTURE DETAILS (6)

SHEET NO.
U-14



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

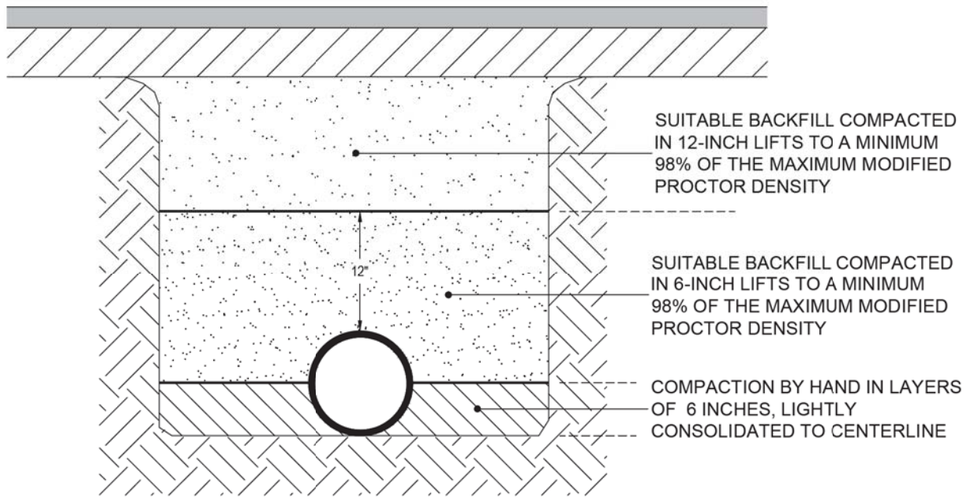
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY CONTRACT NO.	COUNTY	FINANCIAL PROJECT ID
18-D-00007	HILLSBOROUGH	437246-1-58-01

WATER MAIN CROSS SECTIONS

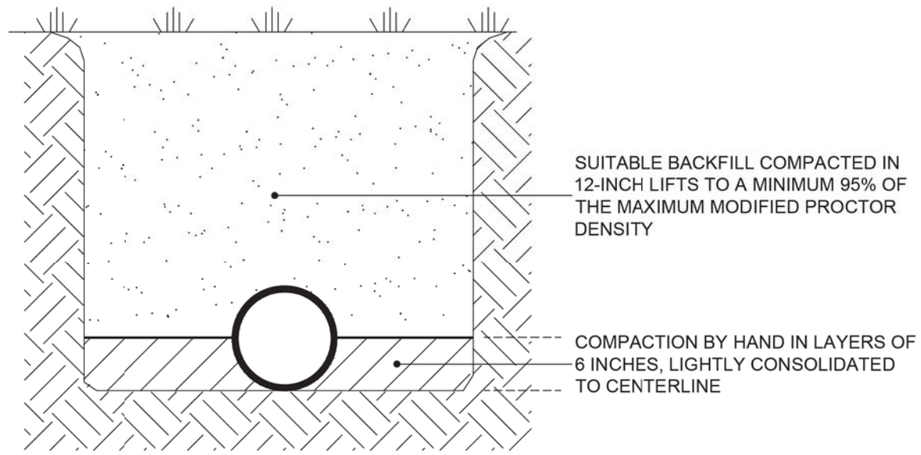
SHEET NO. U-15



NOTES:

1. TYPE 2 TRENCH IS DEFINED AS A FLAT-BOTTOM TRENCH. LIGHTLY CONSOLIDATE BACKFILL TO CENTERLINE OF PIPE.
2. THIS STANDARD SHALL BE UTILIZED IN THE ABSENCE OF SPECIFIC STANDARDS. THE STANDARD OF THE AGENCY CONTROLLING THE RIGHT-OF-WAY SHALL GOVERN UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
3. SUITABLE BACKFILL SHALL BE DEFINED AS MATERIAL FREE FROM CINDERS, ASHES, REFUSE, CLAY, ORGANIC MATTER, BOULDERS, ROCKS OR STONES, OR OTHER MATERIAL THAT IN THE OPINION OF THE CITY ENGINEER IS UNSUITABLE.
4. NON-PERVIOUS AREAS SHALL MEAN ANY CONCRETE OR ASPHALT CURB, SIDEWALK, TRAIL, DRIVEWAY, OR ROADWAY.

City of Tampa Florida Water Department	LAST REVISION	TRENCHING, BEDDING AND BACKFILL DETAIL FOR NON-PERVIOUS (PAVED) AREAS	2.01A
	JAN 2018		



NOTES:

1. TYPE 2 TRENCH IS DEFINED AS A FLAT-BOTTOM TRENCH. LIGHTLY CONSOLIDATE BACKFILL TO CENTERLINE OF PIPE.
2. THIS STANDARD SHALL BE UTILIZED IN THE ABSENCE OF SPECIFIC STANDARDS. THE STANDARD OF THE AGENCY CONTROLLING THE RIGHT-OF-WAY SHALL GOVERN UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
3. SUITABLE BACKFILL SHALL BE DEFINED AS MATERIAL FREE FROM CINDERS, ASHES, REFUSE, CLAY, ORGANIC MATTER, BOULDERS, ROCKS OR STONES, OR OTHER MATERIAL THAT IN THE OPINION OF THE CITY ENGINEER IS UNSUITABLE.
4. NON-PAVED AREA IS A PERVIOUS AREA. IF ANY PART OF THE TRENCH IS WITHIN A CONCRETE OR ASPHALT CURB, SIDEWALK, DRIVEWAY, OR ROADWAY, THEN STANDARD DETAIL 2.01 APPLIES.

City of Tampa Florida Water Department	LAST REVISION	TRENCHING, BEDDING, AND BACKFILL DETAIL FOR PERVIOUS (NON-PAVED) AREAS	2.02
	JUL 2018		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

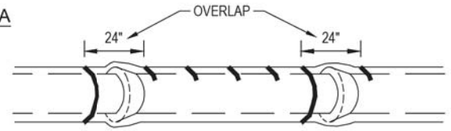
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN STANDARD DETAILS (1)

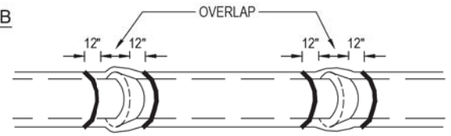
SHEET NO. U-16

METHOD A



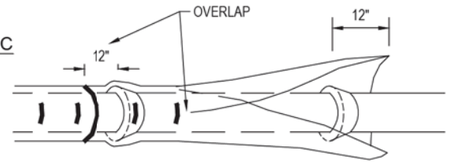
POLYETHYLENE TUBE IS CUT INTO LENGTHS APPROXIMATELY TWO FEET LONGER THAN THE PIPE SECTION AND PLACED AROUND IT. AFTER THE PIPE JOINT IS ASSEMBLED, THE POLYETHYLENE TUBE IS MADE TO OVERLAP THE JOINT AND THE OVERLAP SECURED IN PLACE. SINCE THE TUBE IS CONSIDERABLY LARGER THAN THE BARREL OF PIPE, IT IS MADE TO FIT SNUGLY BY FOLDING OVER AT THE TOP AND SECURING WITH TAPE EVERY 24" ALONG THE PIPE SECTION.

METHOD B



POLYETHYLENE TUBE IS CUT ONE FOOT SHORTER THAN THE LENGTH OF THE PIPE SECTION. AFTER PLACEMENT OF THE PIPE, IT IS FOLDED AND SECURED SNUGLY OVERALL. A THREE FOOT LENGTH OF POLYETHYLENE TUBE PLACED OVER THE END OF THE PRECEEDING SECTION IS THEN PULLED IN PLACE OVER THE JOINT AFTER ASSEMBLY AND SECURED.

METHOD C

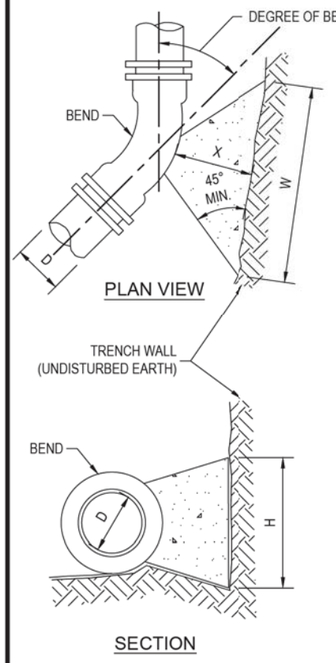


POLYETHYLENE SHEET IS CUT TO A LENGTH TWO FEET LONGER THAN THE PIPE SECTION. THE SHEET IS WRAPPED AROUND THE PIPE SO THAT IT OVERLAPS CIRCUMFERENTIALLY OVER THE TOP QUADRANT OF THE PIPE, THEN SECURED. AFTER JOINT ASSEMBLY, THE SURPLUS LENGTH OF POLYETHYLENE FILM IS SECURED AROUND THE JOINT, PROVIDING AN OVERLAP OF EACH JOINT. TAPE AT EACH JOINT AND AT 3' INTERVALS IN BETWEEN.

NOTES:

1. USE BLUE POLYETHYLENE FILM AND TAPE ONLY.
2. POLYETHYLENE FILM SHALL BE A MINIMUM OF 8 MIL. THICKNESS.
3. SPIRAL WRAP NOT REQUIRED WITH POLYWRAP.

City of Tampa Florida Water Department	LAST REVISION	POLYETHYLENE ENCASEMENT INSTALLATION DETAIL	2.05
	JUL 2018		



DIMENSIONS OF THRUST BLOCKS FOR GOOD SOIL								
	SIZE (D)	4"	6"	8"	12"	16"	20"	24"
11-1/4° BEND	THRUST (LBS.)	674	1,393	2,396	5,097	8,857	13,649	19,472
	BEARING AREA (FT.^{2})	0.51	1.05	1.80	3.83	6.65	10.25	14.63
	CONCRETE (YDS.^{3})	0.005	0.015	0.033	0.104	0.239	0.459	0.783
	H (FT.)	0.6	0.8	1.1	1.6	2.1	2.6	3.1
	W (FT.)	0.9	1.3	1.6	2.4	3.2	3.9	4.7
	X (FT.)	0.4 MIN.	0.6 MIN.	0.8 MIN.	1.2 MIN.	1.6 MIN.	2.0 MIN.	2.3 MIN.
22-1/2° BEND	THRUST (LBS.)	1,342	2,772	4,769	10,145	17,628	27,166	38,757
	BEARING AREA (FT.^{2})	1.01	2.08	3.58	7.61	13.22	20.37	29.07
	CONCRETE (YDS.^{3})	0.012	0.035	0.080	0.252	0.580	1.113	1.792
	H (FT.)	0.8	1.2	1.5	2.3	3.0	3.7	4.4
	W (FT.)	1.2	1.8	2.3	3.4	4.5	5.5	6.6
	X (FT.)	0.6 MIN.	0.9 MIN.	1.2 MIN.	1.7 MIN.	2.2 MIN.	2.8 MIN.	3.0 MIN.
45° BEND	THRUST (LBS.)	2,632	5,437	9,355	19,901	34,579	53,288	76,024
	BEARING AREA (FT.^{2})	1.97	4.08	7.02	14.93	25.94	39.98	57.04
	CONCRETE (YDS.^{3})	0.029	0.087	0.198	0.620	1.387	2.301	3.517
	H (FT.)	1.2	1.7	2.2	3.2	4.2	5.2	6.2
	W (FT.)	1.7	2.5	3.2	4.7	6.2	7.7	9.3
	X (FT.)	0.9 MIN.	1.2 MIN.	1.6 MIN.	2.4 MIN.	3.0 MIN.	3.0 MIN.	3.0 MIN.
90° BEND	THRUST (LBS.)	4,863	10,047	17,286	36,772	63,894	98,463	140,474
	BEARING AREA (FT.^{2})	3.65	7.53	12.96	27.58	47.91	73.84	105.34
	CONCRETE (YDS.^{3})	0.068	0.203	0.459	1.360	2.561	4.250	6.496
	H (FT.)	1.6	2.2	3.0	4.3	5.7	7.0	8.4
	W (FT.)	2.3	3.4	4.4	6.4	8.5	10.5	12.6
	X (FT.)	1.2 MIN.	1.7 MIN.	2.2 MIN.	3.0 MIN.	3.0 MIN.	3.0 MIN.	3.0 MIN.

NOTES:

1. CONCRETE SHALL BE KEPT AT SUFFICIENT DISTANCE FROM JOINT FOR REMOVAL OF ALL JOINT ACCESSORIES INCLUDING BOLTS.
2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
3. THIS TABLE SHOWS THE MINIMUM SIZE THRUST BLOCKS FOR SOIL BEARING PRESSURE OF 2000 PSF AND AN INTERNAL PRESSURE OF 190 PSI. COVER TO T.O.P. IS 3 FEET FOR 12" AND SMALLER MAINS; 4 FEET FOR 16" AND LARGER MAINS.
4. FITTINGS SHALL BE COMPLETELY POLYWRAPPED PRIOR TO POURING THRUST BLOCKS.

WARNING - POOR AND WET SOIL (SILTY SOILS, CLAY, MUCK AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.

City of Tampa Florida Water Department	LAST REVISION	THRUST BLOCKS FOR BENDS	2.07
	JUL 2018		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

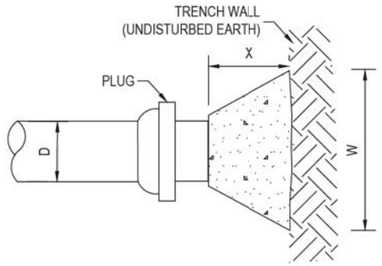
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

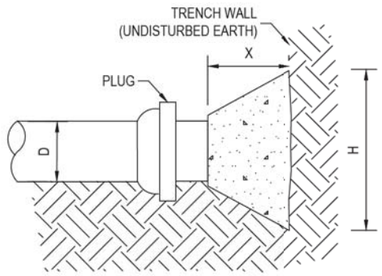
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN STANDARD DETAILS (2)

SHEET NO. U-17



PLAN VIEW



SECTION

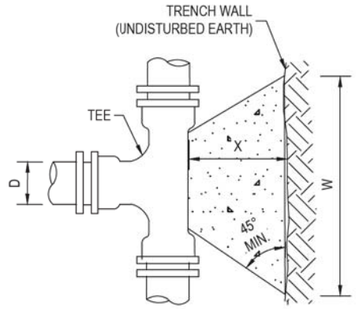
DIMENSIONS OF THRUST BLOCKS FOR GOOD SOIL								
PLUG	SIZE (D)	4"	6"	8"	12"	16"	20"	24"
	THRUST (LBS.)	3,439	7,104	12,223	26,002	45,180	69,624	99,330
	BEARING AREA ($FT.^2$)	2.58	5.33	9.17	19.50	33.89	52.22	74.50
	CONCRETE ($YDS.^3$)	0.042	0.126	0.285	0.891	1.811	3.005	4.594
	H (FT.)	1.3	1.9	2.5	3.6	4.8	5.9	7.0
	W (FT.)	2.0	2.8	3.7	5.4	7.1	8.9	10.6
	X (FT.)	1.0 MIN.	1.4 MIN.	1.9 MIN.	2.7 MIN.	3.0 MIN.	3.0 MIN.	3.0 MIN.

NOTES:

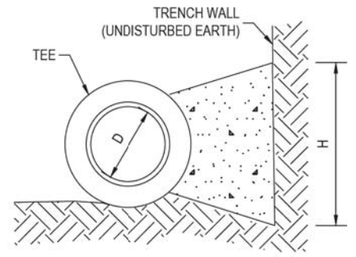
1. CONCRETE SHALL BE KEPT AT SUFFICIENT DISTANCE FROM JOINT FOR REMOVAL OF ALL JOINT ACCESSORIES INCLUDING BOLTS.
2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
3. THIS TABLE SHOWS THE MINIMUM SIZE THRUST BLOCKS FOR SOIL BEARING PRESSURE OF 2000 PSF AND AN INTERNAL PRESSURE OF 190 PSI. COVER TO T.O.P. IS 3 FEET FOR 12" AND SMALLER MAINS; 4 FEET FOR 16" AND LARGER MAINS.
4. PLUGS SHALL BE COMPLETELY POLYWRAPPED PRIOR TO POURING THRUST BLOCKS.

WARNING - POOR AND WET SOIL (SILTY SOILS, CLAY, MUCK AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.

City of Tampa Florida Water Department	LAST REVISION	THRUST BLOCKS FOR PLUGS	2.08
	JUL 2018		



PLAN VIEW



SECTION

DIMENSIONS OF THRUST BLOCKS FOR GOOD SOIL								
TEES	SIZE (D)	4"	6"	8"	12"	16"	20"	24"
	THRUST (LBS.)	3,439	7,104	12,223	26,002	45,180	69,624	99,330
	BEARING AREA ($FT.^2$)	2.58	5.33	9.17	19.50	33.89	52.22	74.50
	CONCRETE ($YDS.^3$)	0.042	0.126	0.285	0.891	1.811	3.005	4.594
	H (FT.)	1.3	1.9	2.5	3.6	4.8	5.9	7.0
	W (FT.)	2.0	2.8	3.7	5.4	7.1	8.9	10.6
	X (FT.)	1.0 MIN.	1.4 MIN.	1.9 MIN.	2.7 MIN.	3.0 MIN.	3.0 MIN.	3.0 MIN.

NOTES:

1. SIZE (D), SHALL BE THE BRANCH SIZE OF TEES.
2. CONCRETE SHALL BE KEPT AT SUFFICIENT DISTANCE FROM JOINT FOR REMOVAL OF ALL JOINT ACCESSORIES INCLUDING BOLTS.
3. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
4. THIS TABLE SHOWS THE MINIMUM SIZE THRUST BLOCKS FOR SOIL BEARING PRESSURE OF 2000 PSF AND AN INTERNAL PRESSURE OF 190 PSI.
5. TEES SHALL BE COMPLETELY POLYWRAPPED PRIOR TO POURING THRUST BLOCKS.

WARNING - COVER TO T.O.P. IS 3 FEET FOR 12" AND SMALLER MAINS; 4 FEET FOR 16" AND LARGER MAINS. POOR AND WET SOIL (SILTY SOILS, CLAY, MUCK AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.

City of Tampa Florida Water Department	LAST REVISION	THRUST BLOCKS FOR TEES	2.09
	JUL 2018		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

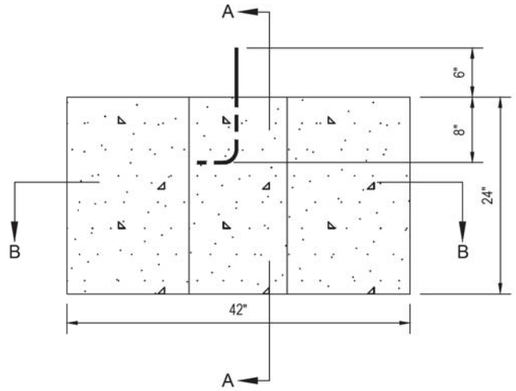
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

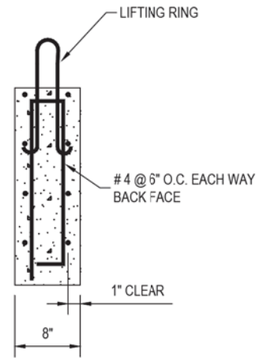
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN STANDARD DETAILS (3)

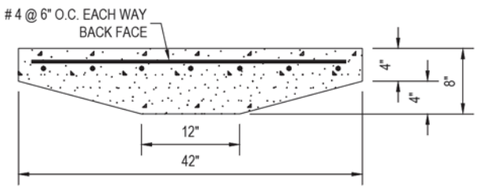
SHEET NO. U-18



ELEVATION



SECTION A-A

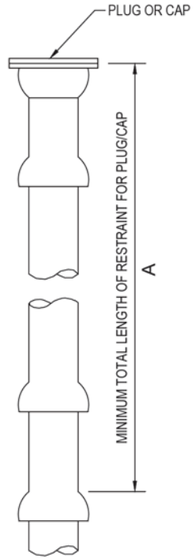


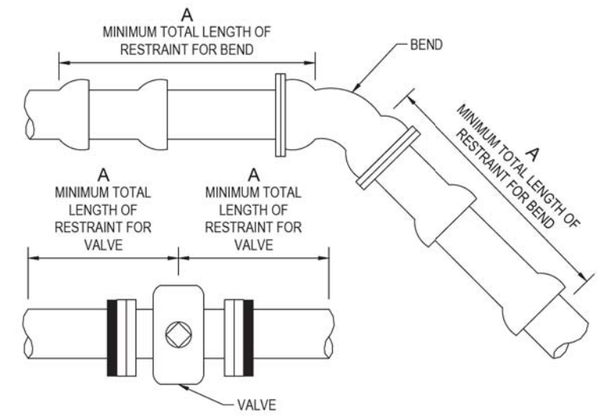
SECTION B-B

NOTES:

1. REINFORCING TO BE STANDARD 60 KSI DEFORMED BAR.
2. CONCRETE F'C=3000 PSI
3. PRECAST THRUST BLOCKING TO BE USED ONLY ON FIRE HYDRANTS AND 8" OR SMALLER FITTINGS, IF ALLOWED BY CITY ENGINEER.
4. A 12"X18" SPACER BLOCK SHALL BE PLACED BETWEEN THE PRECAST THRUST BLOCK AND FITTING IF SO DIRECTED BY CITY ENGINEER.

City of Tampa Florida Water Department	LAST REVISION		
	JUL 2018	PRECAST CONCRETE THRUST BLOCK	2.10





RESTRAIN "A" (LF)									
FITTING / PIPE	4"	6"	8"	12"	16"	20"	24"	30"	36"
11-1/4°	4	5	8	10	11	13	15	19	21
22-1/2°	8	11	15	20	21	26	31	38	44
45°/OFFSET	16	23	30	43	45	55	65	78	91
90°	39	55	73	103	109	133	156	189	220
PLUG/CAP/VALVE*	69	98	128	179	179	218	255	306	356
A = MINIMUM FOOTAGE OF PIPE TO BE RESTRAINED									
* = FOR IN-LINE VALVE, RESTRAINT LENGTH "A" REQUIRED BOTH WAYS FROM VALVE									

NOTES:

1. THIS TABLE IS BASED ON:
   a. MAXIMUM TEST PRESSURE OF 190 PSI
   b. LAYING CONDITION TYPE 2 (SEE DETAILS 2.01 AND 2.02)
   c. POOR SOIL CONDITIONS
   d. USING D.I.P.
   e. 3 FEET OF COVER FOR 12" AND SMALLER MAINS; 4 FEET OF COVER FOR 16" AND LARGER MAINS
   f. HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
2. "RESTRAINED" PIPE SHALL BE MANUFACTURED RESTRAINED JOINT PIPE, PUSH-ON JOINT PIPE RESTRAINED W/GASKET-TYPE "GRIPPER RESTRAINTS", OR MECHANICAL JOINT PIPE RESTRAINED BY MEGALUG (OR APPROVED EQUIVALENT).
3. ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.

City of Tampa Florida Water Department	LAST REVISION		
	JUL 2018	RESTRAINED JOINT STANDARD FOR BENDS, PLUGS, CAPS, AND VALVES	2.11

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

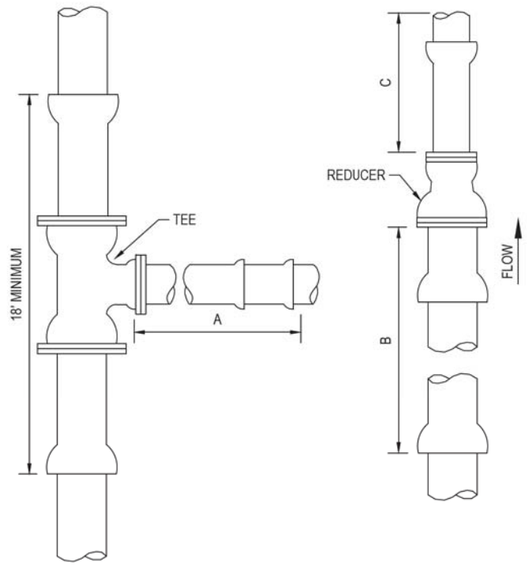
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN
STANDARD DETAILS (4)

SHEET NO. U-19



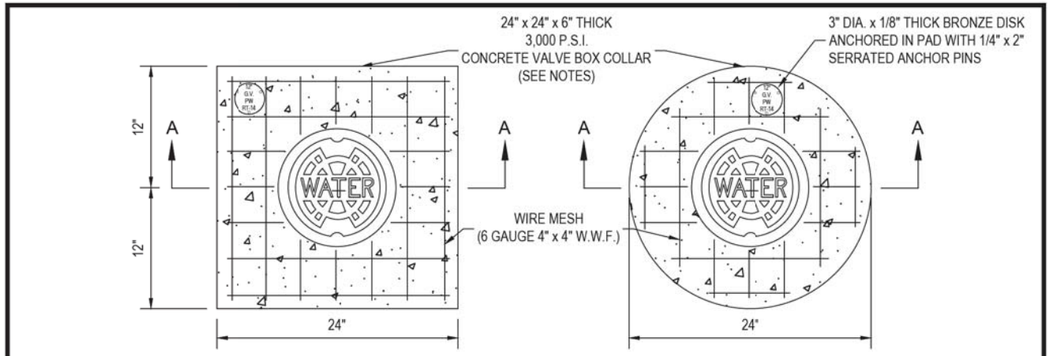
FITTING SIZE	RESTRAIN (LF)		UNRESTRAINED STRAIGHT RUN (LF)
	TEE "A"	REDUCER "B"	REDUCER "C"
4x4	31	*	*
6x4	14	50	74
6x6	60	*	*
8x4	A.T.	91	178
8x6	48	54	70
8x8	90	*	*
12x4	A.T.	155	455
12x6	24	130	260
12x8	71	95	144
12x12	143	*	*
16x6	A.T.	151	401
16x8	34	130	265
16x12	96	76	103
16x16	148	*	*
20x6	A.T.	195	659
20x8	18	180	461
20x12	85	136	233
20x16	139	76	96
20x20	186	*	*
24x6	A.T.	236	971
24x8	A.T.	224	700
24x12	74	188	391
24x16	130	139	215
24x20	180	76	93
24x24	224	*	*
30x6	A.T.	293	1534
30x8	A.T.	283	1130
30x12	56	255	678
30x16	118	216	426
30x20	169	168	260
30x24	215	108	138
30x30	275	*	*
36x6	A.T.	345	2230
36x8	A.T.	336	1660
36x12	38	314	1030
36x16	104	283	689
36x20	159	244	466
36x24	206	195	306
36x30	269	108	133
36x36	326	*	*

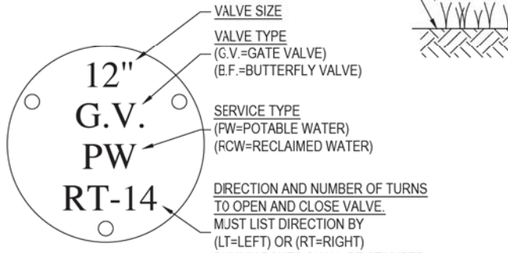
A.T. = RESTRAINT REQUIRED AT TEE ONLY. * = NOT APPLICABLE

NOTES:

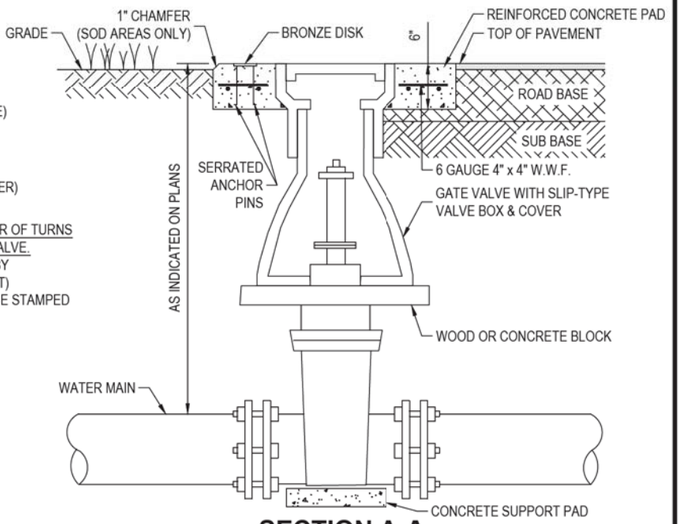
1. THIS TABLE IS BASED ON:
   a. MAXIMUM TEST PRESSURE OF 190 PSI
   b. LAYING CONDITION TYPE 2 (SEE DETAILS 2.01 AND 2.02)
   c. POOR SOIL CONDITIONS
   d. USING D.I.P.
   e. 3 FEET OF COVER FOR 12" AND SMALLER MAINS; 4 FEET OF COVER FOR 16" AND LARGER MAINS
   f. HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
2. RESTRAINT FOR REDUCERS: IF "C" STRAIGHT RUN OF PIPE DOWNSTREAM OF REDUCER NOT AVAILABLE, THE RESTRAIN "B" UPSTREAM OF REDUCER.
3. "RESTRAINED" PIPE SHALL BE MANUFACTURED RESTRAINED JOINT PIPE, PUSH-ON JOINT PIPE RESTRAINED W/GASKET-TYPE "GRIPPER RESTRAINTS", OR MECHANICAL JOINT PIPE RESTRAINED BY MEGALUG (OR APPROVED EQUIVALENT).
4. ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.

City of Tampa Florida Water Department	LAST REVISION	RESTRAINED JOINT STANDARD FOR TEES AND REDUCERS	2.12A
	JUL 2018		





BRONZE DISK DETAIL



SECTION A-A

NOTES :

1. CIRCULAR OR SQUARE CONCRETE PAD REQUIRED FOR ALL VALVE BOX INSTALLATIONS.
2. CAST IRON VALVE BOXES SHALL BE FIRMLY SUPPORTED AND CENTERED AND PLUMB OVER THE OPERATING NUT OF THE VALVE. VALVE BOX COVER SHALL BE FLUSH WITH THE SURFACE OF THE FINISHED PAVEMENT, OR GRADE OR AT SUCH OTHER LEVEL AS MAY BE DIRECTED BY THE DEPARTMENT.
3. "BLUE" WATER VALVE LOCATE MARKERS REQUIRED FOR ALL VALVE INSTALLATIONS.
4. EMBED BRONZE VALVE INFO DISK INTO CONCRETE VALVE BOX COLLAR.
5. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST T.W.D. APPROVED MATERIAL SPECIFICATIONS.
6. IF VALVE IS LOCATED WITHIN A SIDEWALK CONCRETE COLLAR MAY BE ELIMINATED AND DISK SET FLUSH DIRECTLY IN SIDEWALK.
7. BRONZE DISK REQUIRED FOR ALL VALVES AND DUMMY BOXES.

City of Tampa Florida Water Department	LAST REVISION	VALVE INSTALLATION W/VALVE BOX & PAD FOR DI OR CI PIPE	3.01
	JUL 2018		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

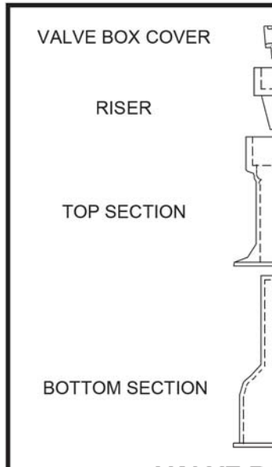
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

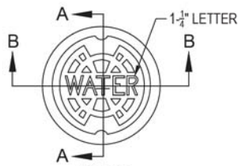
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN
STANDARD DETAILS (5)

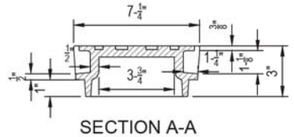
SHEET NO.
U-20



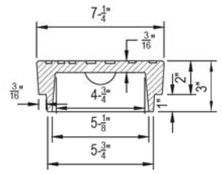
VALVE BOX ASSEMBLY



PLAN

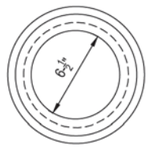


SECTION A-A

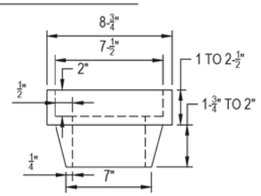


SECTION B-B

VALVE BOX COVER



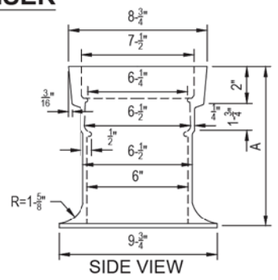
PLAN



SIDE VIEW

RISER

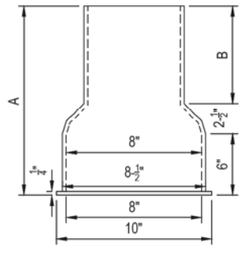
PLAN



PLAN

SIDE VIEW

TOP SECTION



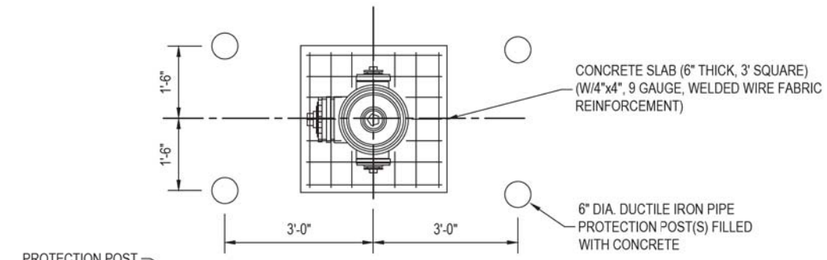
SIDE VIEW

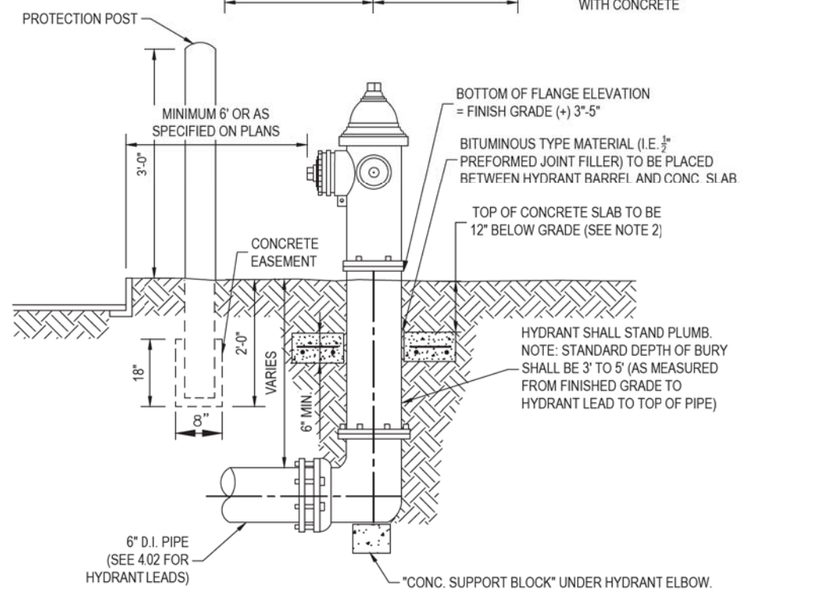
BOTTOM SECTION

TOP SECTION	SIZE	A
	10"	10"
	16"	16"

BOTTOM SECTION	SIZE	A	B
	15"	15"	6-1/2"
	24"	24"	15-1/2"
	36"	36"	27-1/2"

	LAST REVISION		
City of Tampa Florida Water Department	JUL 2018	VALVE BOX, SLIP TYPE	3.04





NOTES:

1. FIRE HYDRANT BARREL ABOVE THE GROUND LINE SHALL BE PAINTED WITH A HIGH-GRADE ENAMEL PAINT, FEDERAL SAFETY YELLOW (OSHA APPROVED), AND THE HYDRANT BONNET SHALL BE PAINTED OSHA GREEN.
2. CONCRETE SLAB MAY BE ELIMINATED IN AREAS WHERE HYDRANT IS SET IN SIDEWALK AND SIDEWALK HAS BEEN INSTALLED PRIOR TO FINAL ACCEPTANCE OF THE HYDRANT.
3. THRUST RESTRAINT FOR HYDRANT:
   a) HYDRANT SHALL BE FIRMLY SUPPORTED UNDER ELBOW IN ALL METHODS BY SUPPORT BLOCK
   b) ALL BACKFILL SHALL BE THOROUGHLY COMPACTED UNDER SUPPORT BLOCK AND UNDER THRUST COLLAR
   c) ALL HYDRANT LEADS SHALL BE RESTRAINED BY MEGALUGS OR EQUIVALENT MECHANICAL RESTRAINTS
4. PROTECTION POSTS ARE REQUIRED WHEN HYDRANT IS LESS THAN 6 FEET FROM EDGE OF PAVEMENT, OR AS DIRECTED BY THE ENGINEER.
5. FOR PVC MAINS, INSTALL CONCRETE SUPPORT BLOCK UNDER ALL HYDRANT TEES.

	LAST REVISION		
City of Tampa Florida Water Department	JUL 2018	FIRE HYDRANT INSTALLATION	4.01

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

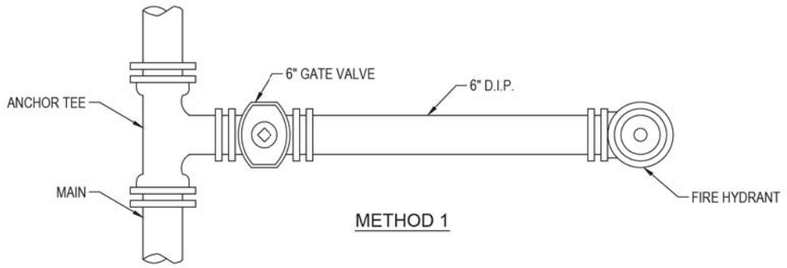
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

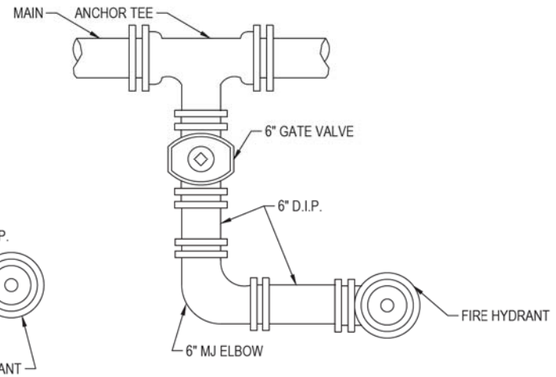
CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN STANDARD DETAILS (6)

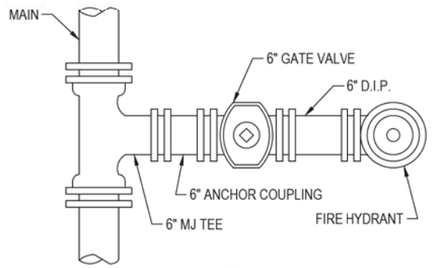
SHEET NO. U-21



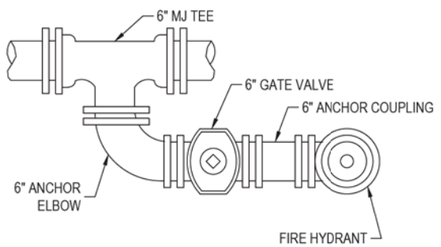
METHOD 1



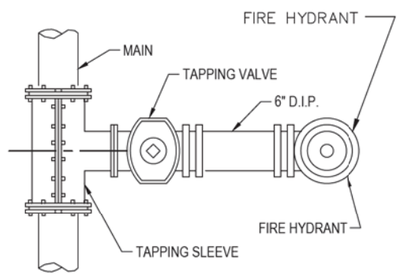
METHOD 3



METHOD 2



METHOD 4

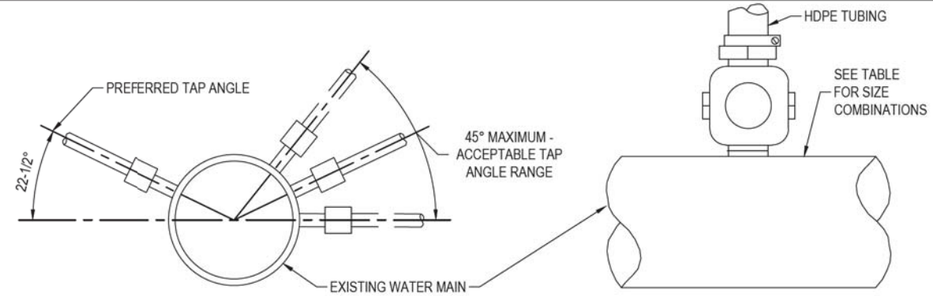


METHOD 5

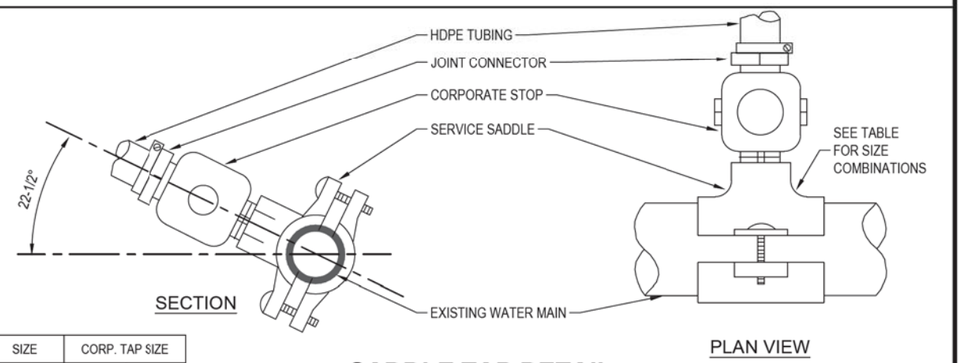
NOTES:

1. VALVE SHALL BE SET IN ACCORDANCE WITH DETAIL 3.01. FOR HYDRANT SET, SEE DETAIL 4.01.
2. ALL VALVES SHALL BE ANCHORED TO BRANCH OF TEE ON ALL HYDRANT INSTALLATIONS.
3. ALL HYDRANT LEADS SHALL BE RESTRAINED BY MEGALUGS OR EQUIVALENT.
4. FOR PVC MAINS, INSTALL CONCRETE SUPPORT BLOCK UNDER HYDRANT TEES.

City of Tampa Florida Water Department	LAST REVISION	FIRE HYDRANT METHODS OF INSTALLATION	4.02
	JUL 2018		



DIRECT TAP DETAIL



SADDLE TAP DETAIL

PIPE	SIZE	CORP. TAP SIZE	
		1"	2"
DI/CI	12"	DT	DT
	8"	DT	SS
	6"	DT	SS
	4"	SS	SS
PVC	2", 2-1/2"	SS	NA
	8", C-900	SS	SS
	6", C-900	SS	SS
	2"-SDR21	SS	NA
OTHER*	12"	SS	SS
	10"	SS	SS
	8"	SS	SS
	6"	SS	SS
	4"	SS	NA
	3"	SS	NA
	2", 2-1/2"	SS	NA

LEGEND
DT- DIRECT TAP CAN BE ALLOWED SS- SERVICE SADDLE IS REQUIRED NA- NOT ALLOWED
*ASBESTOS CEMENT, STEEL, GALVANIZED IRON PIPE, NON STD PVC, ETC.

City of Tampa Florida Water Department	LAST REVISION	TAPPING DETAIL FOR 3/4", 1", 1-1/2" & 2" W/DI, CI, OR PVC PIPE	5.01A
	JUL 2018		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

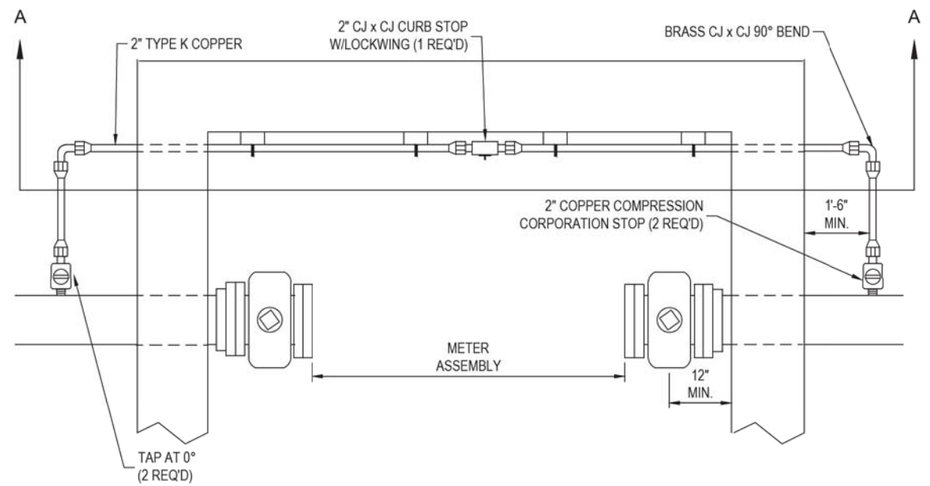
CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

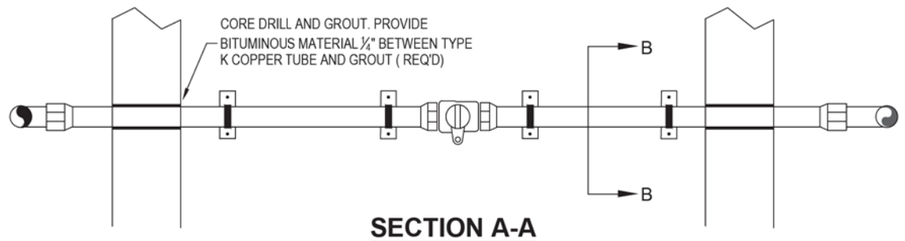
CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

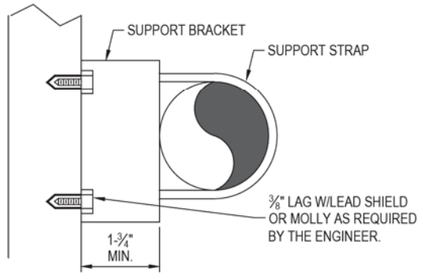
WATER MAIN
STANDARD DETAILS (7)

SHEET NO. U-22



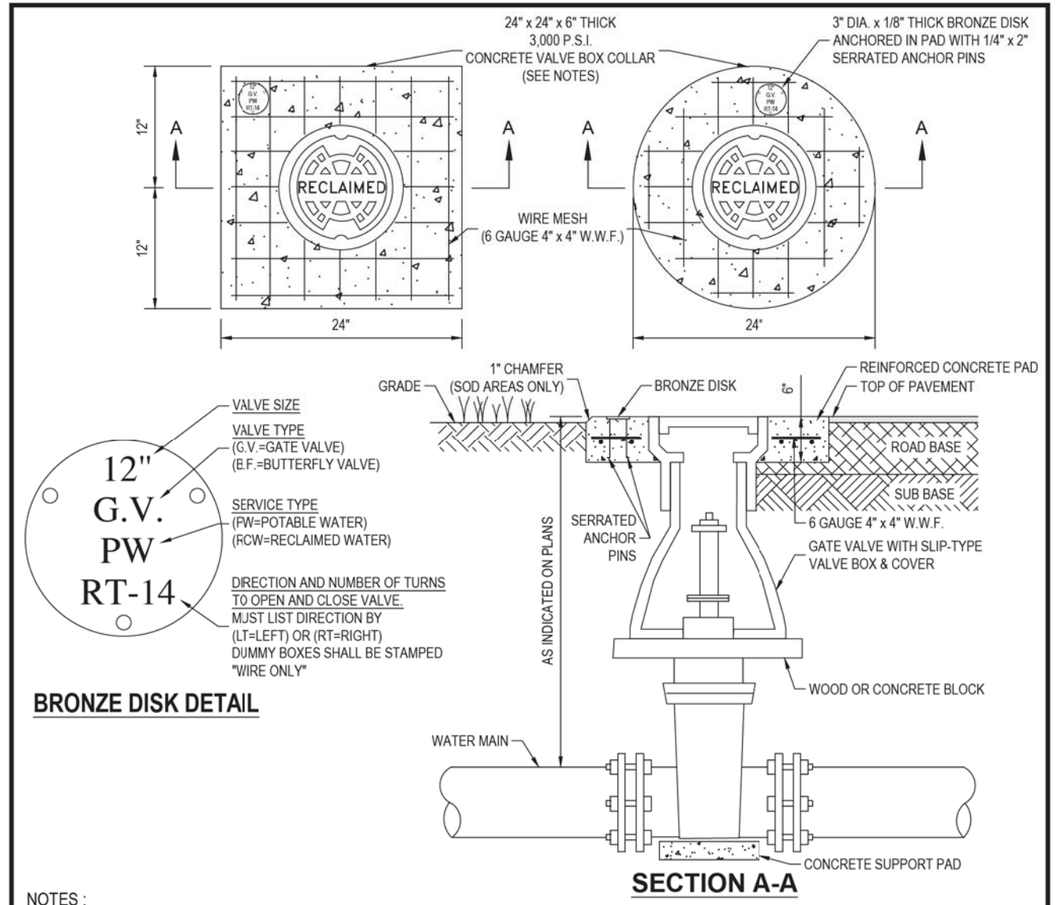


SECTION A-A



SECTION B-B

City of Tampa Florida Water Department	LAST REVISION JUL 2018	2" BY-PASS LINE	6.13



BRONZE DISK DETAIL

SECTION A-A

NOTES :

1. CIRCULAR OR SQUARE CONCRETE PAD REQUIRED FOR ALL VALVE BOX INSTALLATIONS.
2. CAST IRON VALVE BOXES SHALL BE FIRMLY SUPPORTED AND CENTERED AND PLUMB OVER THE OPERATING NUT OF THE VALVE. VALVE BOX COVER SHALL BE FLUSH WITH THE SURFACE OF THE FINISHED PAVEMENT, OR GRADE OR AT SUCH OTHER LEVEL AS MAY BE DIRECTED BY THE DEPARTMENT.
3. "BLUE" WATER VALVE LOCATE MARKERS REQUIRED FOR ALL VALVE INSTALLATIONS.
4. EMBED BRONZE VALVE INFO DISK INTO CONCRETE VALVE BOX COLLAR.
5. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST T.W.D. APPROVED MATERIAL SPECIFICATIONS.
6. IF VALVE IS LOCATED WITHIN A SIDEWALK CONCRETE COLLAR MAY BE ELIMINATED AND DISK SET FLUSH DIRECTLY IN SIDEWALK.
7. BRONZE DISK REQUIRED FOR ALL VALVES AND DUMMY BOXES.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	VALVE INSTALLATION W/VALVE BOX & PAD FOR DI OR CI PIPE - RECLAIMED	7.01R

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CHRISTOPHER K. MARTIN, P.E.
P.E. LICENSE NUMBER 66598
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

WATER MAIN STANDARD DETAILS (8)

SHEET NO. U-23

CONTRACT PLANS COMPONENTS

ROADWAY PLANS
SIGNING AND PAVEMENT MARKING PLANS
SIGNALIZATION PLANS
LANDSCAPE ARCHITECTURE PLANS
UTILITY WORK BY HIGHWAY CONTRACTOR AGREEMENT PLANS

INDEX OF ROADWAY PLANS

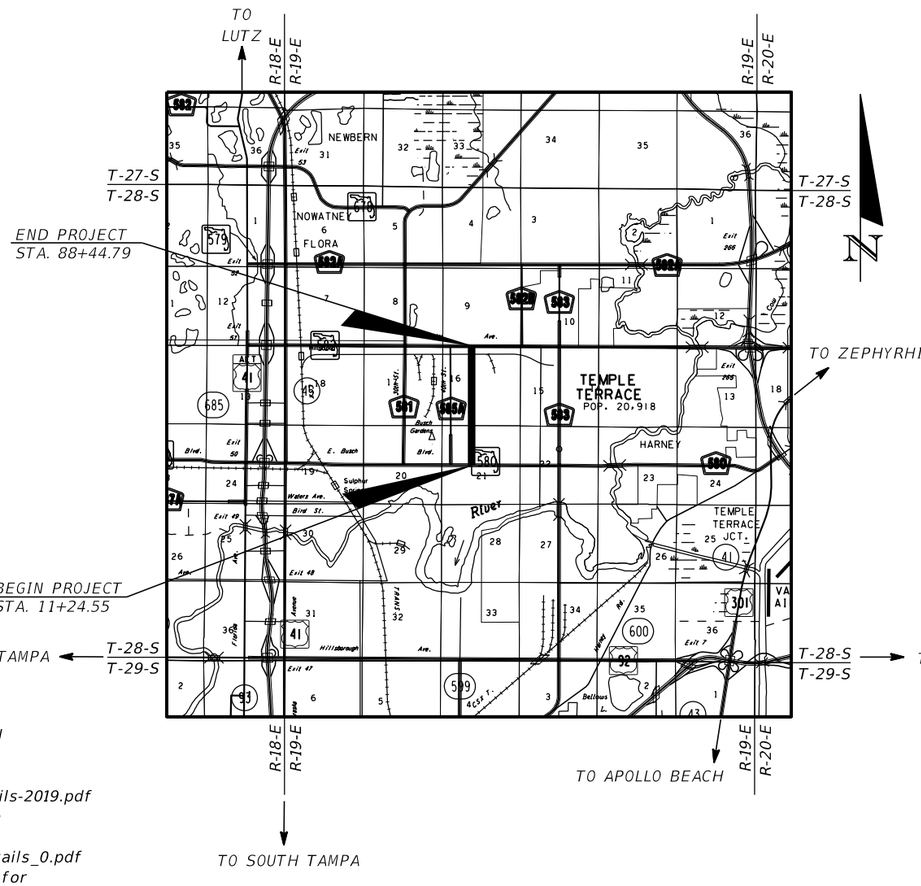
SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2 - 2A (1)	SIGNATURE SHEET
3	SUMMARY OF PAY ITEMS
4 - 6	TYPICAL SECTIONS
7 - 8	TYPICAL SECTION DETAILS
9	SUMMARY OF DRAINAGE STRUCTURES
10	PROJECT CONTROL
11	GENERAL NOTES
12 - 26	ROADWAY PLANS
27 - 28	SPECIAL PROFILES
29 - 30	INTERSECTION LAYOUT
31	INTERSECTION DETAIL
32 - 42	DRAINAGE STRUCTURES
43 - 55	CROSS SECTIONS
56 - 71	DRIVEWAY HALF-SECTIONS
72 - 75	TEMPORARY TRAFFIC CONTROL PLANS
76 - 90	UTILITY ADJUSTMENTS
SQ-1 - SQ-24	SUMMARY OF QUANTITIES

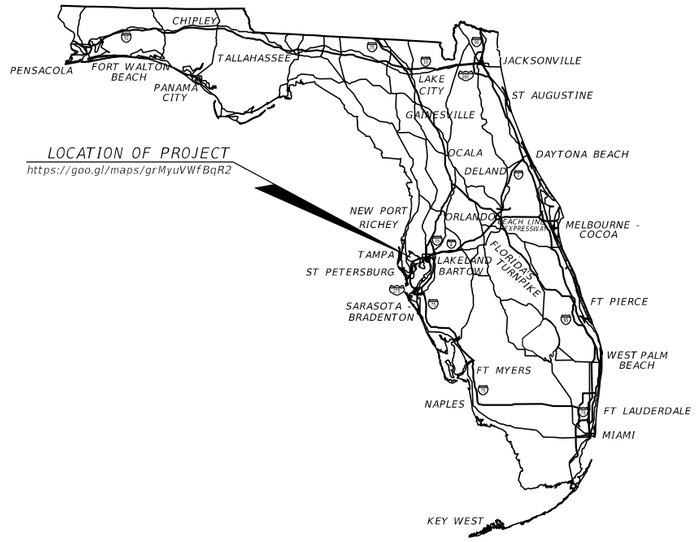
STATE OF FLORIDA
CITY OF TAMPA

WALK-BIKE LAP PROJECT

FINANCIAL PROJECT ID 437246-1-58-01
(FEDERAL FUNDS)
CITY PROJECT NO. 1001220
HILLSBOROUGH COUNTY

46TH STREET FROM SR 580 (BUSCH BLVD) TO SR 582 (FOWLER AVE)





GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2020-21 Standard Plans for Road and Bridge Construction, applicable Interim Revisions (IRs), and City of Tampa Stormwater Standards: Which can be found at the following web site:
https://www.tampagov.net/sites/default/files/stormwater/files/sw-standard-details-2019.pdf
For the City of Tampa Water Department Engineering Standard Details can be found at the following web site:
https://www.tampagov.net/sites/default/files/water/files/technical_standard_details_0.pdf
For the CIty of Tampa Wastewater Department Technical Standards Guideline for Construction of Wastewater Facilities, go to the web page site:
https://www.tampagov.net/sites/default/files/wastewater/files/TECHNICAL_STANDARDS_GUIDELINE_FOR_CONSTRUCTION_OF_WASTEWATER_FACILITIES_JULY_2014_VERSION_6.PDF

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, July 2020 Standard Specifications for Road and Bridge Construction at the following website:
http://www.fdot.gov/programmanagement/Implemented/SpecBooks

REVISIONS:

1 Roadway Sheets 1, 2A, 3, & SQ-1

KEY SHEET REVISIONS

DATE	DESCRIPTION
07-09-20	Added Sheet Number 2A and Revised Standard Specifications and Standard Plans Date

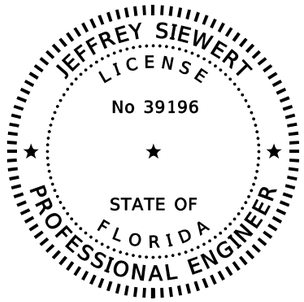
REVISION 1 PLANS
07/09/20

ROADWAY PLANS
ENGINEER OF RECORD:
JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
(813) 978-8688
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA PROJECT MANAGER:
NINA MABILLEAU, E.I.

FISCAL YEAR	SHEET NO.
21	1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

AYRES ASSOCIATES INC
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION: 4356
JEFFREY SIEWERT, P.E. NO. 39196

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2A	SIGNATURE SHEET
3	SUMMARY OF PAY ITEMS
SQ-1	SUMMARY OF QUANTITIES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
07-09-20	1 ADDED SHEET		

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SIGNATURE SHEET

SHEET NO. 2A

CITY OF TAMPA
PROPOSAL SUMMARY OF PAY ITEMS
CIP NO.: 1001220 / FPID: 437246-1-58-01

SUMMARY OF ROADWAY

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
0101 1	MOBILIZATION	LS	1
0102 1	MAINTENANCE OF TRAFFIC	LS	1
0102104	TEMPORARY SIGNALIZATION AND MAINTENANCE, INTERSECTION	ED	920
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION	ED	920
0104 10 3	SEDIMENT BARRIER	LF	5530
0104 18	INLET PROETECTION SYSTEM	EA	53
0107 1	LITTER REMOVAL	AC	100.509
0107 2	MOWING	AC	100.509
0110 1 1	CLEARING & GRUBBING	AC	3.178
0110 4 10	REMOVAL OF EXISTING CONCRETE	SY	2987
0110 7 1	MAILBOX, F&I SINGLE	EA	11
0120 1	REGULAR EXCAVATION	CY	55
0160 4	TYPE B STABILIZATION	SY	5078
0285709	OPTIONAL BASE, BASE GROUP 09	SY	1662
0327 70 6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	SY	22301
0327 70 10	MILLING EXIST ASPH PAVT, 5" AVG DEPTH	SY	38
0334 1 53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22	TN	144.2
0337 7 83	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC C, FC-12.5, PG 76-22	TN	1980.6
0350 3 7	PLAIN CEMENT CONCRETE PAVEMENT, 9"	SY	110
0425 5 1	MANHOLE, ADJUST, UTILITIES	EA	15
0425 6	VALVE BOXES, ADJUST	EA	49
425.10	CITY OF TAMPA TYPE 1 CURB INLET	EA	3
425.20	CITY OF TAMPA TYPE 2 CURB INLET	EA	1
425.30	CITY OF TAMPA TYPE 3 CURB INLET	EA	1
425.40	CITY OF TAMPA TYPE E DITCH BOTTOM INLET	EA	1
425.50	CITY OF TAMPA TYPE H DITCH BOTTOM INLET	EA	1
425.60	CITY OF TAMPA TYPE T DITCH BOTTOM INLET	EA	15
0425 2 61	MANHOLES, P-8, <10'	EA	2
0430175112	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 12"S/CD	LF	4
0430175115	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 15"S/CD	LF	12
0430175118	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	301
0430175124	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD	LF	116
0430175218	PIPE CULVERT,OPTIONAL MATERIAL,OTHER-ELIP/ARCH, 18"S/CD	LF	179
0430175230	PIPE CULVERT, OPT MATERIAL, OTHER SHAPE - ELIP/ARCH, 30"S/CD	LF	4
0430984129	MITERED END SECTION, OPTIONAL ROUND, 24" SD	EA	1
0515 1 2	PIPE HANDRAIL - GUIDERAIL, ALUMINUM	LF	35
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	2210
0520 2 4	CONCRETE CURB, TYPE D	LF	380
0520 2 8	CONCRETE CURB, TYPE RA	LF	116
0520 70	CONCRETE TRAFFIC SEPARATOR, SPECIAL- VARIABLE WIDTH	SY	51
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	1439
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	6311
0523 1	PATTERNED PAVEMENT, VEHICULAR AREAS	SY	136
0524 1 2	CONCRETE DITCH PAVEMENT, NON REINFORCED, 4"	SY	71
0527 2	DETECTABLE WARNINGS	SF	632
0528 1	DIRECTIONAL INDICATOR	SF	96
0536 73	GUARDRAIL REMOVAL	LF	150
0550 10248	FENCING, TYPE B, 7.1-8.0, RESET EXISTING	LF	468
0570 1 2	PERFORMANCE TURF, SOD	SY	7013

1 (1)

SUMMARY OF SIGNING AND PAVEMENT MARKING

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
0700 1 11	SINGLE POST SIGN, F&I GROUNDMOUNT, UP TO 12 SF	AS	42
0700 1 12	SINGLE POST SIGN, F&I GROUNDMOUNT, 12-20 SF	AS	1
0700 1 50	SINGLE POST SIGN, RELOCATE	AS	2
0700 1 60	SINGLE POST SIGN, REMOVE	AS	8
0700 3401	SIGN PANEL, INSTALL, UP TO 12 SF	EA	6
0700 3601	SIGN PANEL, REMOVE, UP TO 12 SF	EA	6
0710 90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	LS	1
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	613
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	910
0711 11141	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE/ 6-10 GAP EXTENSION, 6"	GM	0.037
0711 11143	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE, 12" FOR ROUNDABOUT	GM	0.026
0711 11160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	EA	4
0711 11170	THERMOPLASTIC, STANDARD, WHITE, ARROW	EA	5
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONAL OR CHEVRON	LF	174
0711 14123	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 12" FOR CROSSWALK	EA	275
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	EA	217
0711 14160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE	EA	61
0711 16101	THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6"	GM	2.825
0711 16201	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6"	GM	2.774

SUMMARY OF SIGNALIZATION

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
630-2-11	CONDUIT, F&I, OPEN TRENCH	LF	60
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	LF	230
632-7-1	SIGNAL CABLE, NEW OR RECONSTRUCTED INTERSECTION, F&I	PI	1
632-7-6	SIGNAL CABLE, REMOVE - INTERSECTION	PI	1
635-2-12	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	EA	14
646-1-11	ALUMINUM SIGNAL POLE, PEDESTAL	EA	3
653-1-11	PEDESTRIAN SIGNAL, F&I, LED, COUNTDOWN, 1-WAY	AS	4
653-1-60	PEDESTRIAN SIGNAL, REMOVE PEDESTRIAN SIGNAL, POLE/PEDESTAL TO REMAIN	AS	2
654-2-22	RECTANGULAR RAPID FLASHING BEACON, F&I, SOLAR, COMPLETE SIGN ASSEMBLY, BACK TO BACK	AS	10
660-1-103	LOOP DETECTOR, INDUCTIVE, F&I, TYPE 3	EA	4
660-2-101	LOOP ASSEMBLY, F&I, TYPE A	AS	4
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	AS	4
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	EA	4
665-1-60	PEDESTRIAN DETECTOR, REMOVE - POLE/PEDESTAL TO REMAIN	EA	2
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	AS	1
670-5-600	TRAFFIC CONTROLLER ASSEMBLY, REMOVE CONTROLLER WITH CABINET	AS	1
700-5-22	INTERNALLY ILLUMINATED SIGN, F&I, OVERHEAD MOUNT, 12-18 SF	EA	4

SUMMARY OF LANDSCAPING

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
25.00	CONNECTION TO TECO ENERGY POWER METER	EA	1
25.01	TREE BUBBLERS 1 GPM - RAINBIRD 1402	EA	114
25.02	3/4" PVC FLEX PIPE	LF	250
25.03	3/4" PVC SCH 40 PIPE	LF	235
25.04	1" PVC SCH 40 PIPE	LF	235
25.05	1-1/2" PVC SCH 40 PIPE	LF	630
25.06	2" PVC SCH 40 PIPE	LF	500
25.07	2-1/2" PVC SCH 40 PIPE - MAIN	LF	1100
25.08	DRIP IRRIGATION-K-FLEX TUBING	SF	820
25.09	LOCATOR TAPE ALONG MAIN	LF	1100
25.10	2" BALL VALVE	EA	1
25.11	1" BACKFLOW PREVENTOR	EA	1
25.12	6" PVC SLEEVE WITH DIRECTIONAL BORE	L/F	410
25.13	CONCRETE VALVE BOX WITH CONC LID	EA	6
25.20	MIR/irrinet CONTROLLER	EA	1
25.21	IRRITROL 200b ELECTRIC CONTROL VALVE 1" SAM - NO PRS	EA	4
25.22	MASTER METER, INC. FLOW METER- 1-1/2"-MULTI-JET WITH ELEC. OUTPUT REGISTER (10gpm rate)	EA	1
25.23	IRRITROL MASTER CONTROL VALVE 216B, WITH DC LATCHING SOLENOID	EA	1
25.24	14-2 MAXICOM SOLID SHIELDED WIRE TO CONTROLLER	LF	35
25.25	KING WIRE NUTS	EA	37
25.26	RAINBIRD QUICK COUPLER RC-3	EA	2
25.27	PRESSURE REGULATOR - 3/4"	EA	2
25.28	DISK FILTER - 1" DF-100	EA	2
25.29	LINE FLUSHING VALVE 3/4"	EA	3
25.30	AIR/VACUUM RELIEF VALVE 3/4"	EA	3
25.40	BID ALLOWANCE FOR CONTRACTOR TO INSTALL 1-1/2" WATER METER	EA	1
580-2.1.1	SABAL PALM - 'Enhanced Root' 16'-24' CT STAGGARED HEIGTHS	EA	20
580-2.1.1	CREPE MYRTLE 'RED ROCKET' 4" caliper standard 65 gallon or B+B	EA	37
580-2.1.1	SIMPSON STOPPER	EA	52
580-2.4	PINE BARK MULCH	CY	4.4
580-2.5	PREPARED PLANTING SOILS	CY	8.8

SUMMARY OF UWHCA

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY TOTAL
1050 51202	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 2"	LF	15
1050 51206	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 6"	LF	73
1050 51208	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 8"	LF	976
1050 51212	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER, 12"	LF	41
1050 61116	UTILITY PIPE- STEEL, FURNISH & INSTALL, CASING, 16"	LF	20
1055 51108	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL ELBOW, 8"	EA	10
1055 51112	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL ELBOW, 12"	EA	4
1055 51208	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL TEE, 8"	EA	6
1055 51308	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL REDUCER, 8"	EA	1
1055 51408	UTILITY FITTINGS, DUCTILE IRON/CAST IRON, FURNISH & INSTALL UNION, 8"	EA	1
1080 24106	UTILITY FIXTURE, VALVE ASSEMBLY, FURNISH AND INSTALL, 6"	EA	1
1080 24108	UTILITY FIXTURE, VALVE ASSEMBLY, FURNISH AND INSTALL, 8"	EA	11
1080 27106	UTILITY FIXTURE- LINE STOP ASSEMBLY, FURNISH AND INSTALL, 6"	EA	1
1080 27108	UTILITY FIXTURE- LINE STOP ASSEMBLY, FURNISH AND INSTALL, 8"	EA	7
1080 29106	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 6"	EA	4
1080 29108	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 8"	EA	49
1080 29112	UTILITY FIXTURE, MECHANICAL JOINT RESTRAINT, FURNISH & INSTALL, 12"	EA	2
1080 32106	UTILITY FIXTURE- SAMPLE POINT, FURNISH & INSTALL, 6"	EA	1
1080 32108	UTILITY FIXTURE- SAMPLE POINT, FURNISH & INSTALL, 8"	EA	6
1644113 08	FIRE HYDRANT, F&I, STANDARD, 2 HOSE, 1PUMPER, 6"	EA	3
1644900	FIRE HYDRANT, REMOVE	EA	3

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
07-09-20	1 REVISED UNIT VALUE		

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF PAY ITEMS

SHEET NO. 3

INDEX OF SUMMARY OF QUANTITY SHEETS

SHEET NO.	SHEET NO.
SQ-1	SUMMARY OF LUMP SUM ITEMS
	SUMMARY OF TEMPORARY TRAFFIC CONTROL PLANS
	SUMMARY OF TEMPORARY SIGNALIZATION & DETECTION
SQ-2	SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES
SQ-3 - SQ-6	SUMMARY OF LITTER REMOVAL AND MOWING
SQ-7 - SQ-10	SUMMARY OF CLEARING AND GRUBBING & REMOVAL ITEMS
SQ-11	SUMMARY OF MAILBOXES
SQ-12 - SQ-13	SUMMARY OF PAVEMENT
SQ-14	SUMMARY OF MISCELLANEOUS DRAINAGE ITEMS
SQ-15	SUMMARY OF UTILITY ADJUSTMENTS
SQ-16	SUMMARY OF RAILINGS
	SUMMARY OF CURB & GUTTER AND/OR TRAFFIC SEPARATORS
SQ-17 - SQ-20	SUMMARY OF SIDEWALK & DETECTABLE WARNINGS
SQ-21	SUMMARY OF GUARDRAIL
	SUMMARY OF FENCING
SQ-22 - SQ-24	SUMMARY OF PERFORMANCE TURF

PAY ITEM NOTES

SHEET NO.	
0110 1	REMOVAL OF EXIST. TREES AND RAILROAD WITHIN R/W LIMITS INCLUDED IN SUMMARY OF CLEARING AND GRUBBING.
	REMOVE, PRESERVE, AND DELIVER RAILROAD RAILINGS TO A DESIGNATED LOCATION WITHIN 15 MILES OF PROJECT LIMITS.
0104 10 3	SEDIMENT BARRIERS THROUGH SIDE STREETS WITHIN STA. RANGE LIMITS TO BE CUT AT CENTER OF SIDE STREET AND WRAP AROUND SIDE STREET RETURNS.
1 425.60, 0430175118, 0430175218	ANY EMBANKMENT REQUIRED IS INCIDENTAL TO THE PROPOSED STORMWATER SYSTEM AND GENERATED BY THE "FURNISH & INSTALL" OF THE PROPOSED STORMWATER PIPES & INLETS.

SUMMARY OF LUMP SUM ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	QUANTITY P	QUANTITY F	DESIGN NOTES	CONSTRUCTION REMARKS
0101 1	MOBILIZATION	1			

SUMMARY OF TEMPORARY TRAFFIC CONTROL PLAN ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	PHASE I DURATION DAYS	PHASE I QUANTITY P	PHASE I TOTAL P	PHASE II DURATION DAYS	PHASE II QUANTITY P	PHASE II TOTAL P	TOTAL P	TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0102 1	MAINTENANCE OF TRAFFIC	LS		1			1		1		460 CONST. DAYS	

SUMMARY OF TEMPORARY TRAFFIC CONTROL PLAN ITEMS

PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	PHASE III DURATION DAYS	PHASE III QUANTITY P	PHASE III TOTAL P	PHASE IV DURATION DAYS	PHASE IV QUANTITY P	PHASE IV TOTAL P	TOTAL P	TOTAL F	GRAND TOTAL P	GRAND TOTAL F	DESIGN NOTES	CONSTRUCTION REMARKS
0102 1	MAINTENANCE OF TRAFFIC	LS		1			1		1		1		460 CONST. DAYS	

SUMMARY OF TEMPORARY SIGNALIZATION & DETECTION

PHASE	DURATION	0102104 TEMPORARY SIGNALS & MAINTENANCE OF INTERSECTION - EACH DAY						0102107 1 TEMPORARY TRAFFIC DETECTION & MAINTENANCE OF INTERSECTION - EACH DAY						DESIGN NOTES	CONSTRUCTION REMARKS
		EXISTING			TEMPORARY			EXISTING			TEMPORARY/NEW				
	DAYS	#	P	F	#	P	F	#	P	F	#	P	F		
1 THRU 4	460	1	460		1	460		1	460		1	460			
SUB-TOTAL			460			460			460			460			
TOTAL						920						920			

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
07-09-20	1 REVISED PAY ITEM NOTES		

JEFFREY SIEWERT, P.E.
P.E. LICENSE NUMBER 39196
AYRES ASSOCIATES
8875 HIDDEN RIVER PKWY, SUITE 200
TAMPA, FL 33637
CERTIFICATE OF AUTHORIZATION 4356

CITY OF TAMPA
TRANSPORTATION DEPARTMENT

CITY PROJECT NO.	COUNTY	FINANCIAL PROJECT ID
1001220	HILLSBOROUGH	437246-1-58-01

SUMMARY OF QUANTITIES

SHEET NO. SQ-1

SPECIFIC PROVISIONS-MASTER

SP-1.01 TRANSPORTATION AND STORMWATER SERVICES (TSS) DEPARTMENT TECHNICAL SPECIFICATIONS:

Florida Department of Transportation Standard Specifications for Road and Bridge Construction dated July 2020 shall be incorporated for construction and materials with the exception of Contractor QAQC requirement.

The following hierarchy of the contract documents shall apply:
The TSS Technical Specifications shall govern, except as noted herein.
In the case of apparent conflict with the project plans, the Specific Provisions shall govern.

SP-2.01 BID ITEMS:

It is the intent of these Contract Documents that any items of work and all costs for which compensation is not directly provided by a bid item but are incidental to various project items of work, shall be prorated and included in the bid item for which they are required. Failure of the Contractor to follow this procedure shall be basis for rejection of its bid.

SP-2.02 WORK DIRECTIVE CHANGE:

A Work Directive Change is a written directive to the Contractor, issued on or after the date of the execution of the Agreement, and signed by the Engineer on behalf of the City, ordering an addition, deletion or revision in the work, or responding to an emergency. A Work Directive Change will not change the contract price or the time for completion, but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the contract price or the time of completion.

Without invalidating the Agreement, certain additions, deletions or revisions in the work may, at any time or from time to time, be authorized by a Change Order or a Work Directive Change. Upon receipt of any such document, the Contractor shall promptly proceed with the work involved.

SP-2.03 LINES AND GRADES:

The General Provisions Section G-8.01 and G-8.02 are revised to read as follows:

G-8.01 General:

All work done under this contract shall be constructed in accordance with the lines and grades as shown on the plans or as directed by the Engineer. The full responsibility for keeping alignment and grade shall rest upon the Contractor.

The Engineer will establish Bench Marks and baseline controlling points only.

G-8.02 Surveys:

The Contractor shall furnish and maintain, with no additional payment, stakes and other such material as may be required for setting reference marks; and shall, with no additional payment, establish all working or construction lines and grades as required from the reference marks set by a Florida Registered Professional Surveyor and Mapper hired and/or employed by the Engineer, and shall be solely responsible for the accuracy thereof. The Contractor shall, however, be subject to the check and review of a Florida Registered Professional Surveyor and Mapper hired and/or employed by the Engineer the Engineer.

Pay items requiring survey information, such as embankment or excavation, shall be documented by of a Florida Registered Professional Surveyor and Mapper. In addition, plotted cross sections and quantity computations must be supplied and certified.

Pay items requiring survey information, such as embankment or excavation, shall be documented by of a Florida Registered Professional Surveyor and Mapper. In addition, plotted cross sections and quantity computations must be supplied and certified. All surveys shall be performed using electronic data collection for data acquisition. All drawings shall be submitted in the most current version of AutoCad being used by the COT department requiring the survey. All surveys must meet the Minimum Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. All surveys must also meet any standards or specifications which may be included as part of the scope of contract.

SP-2.04 REQUIREMENTS FOR CONTROL OF THE WORK:

Prior to the start of the work included in this contract, a Preconstruction Conference will be held by the Engineer to be attended by the Contractor and representatives of the various utilities and others for the purpose of establishing a schedule of operations which will coordinate the work to be done under this contract with all related work to be done by others within the limits of the project. The Contractor shall be prepared for this meeting and shall present a comprehensive construction schedule for all items of work to be accomplished, which will be used as the basis for the development of an overall operational schedule and a list of subcontractors and material suppliers to be used on this work.

All items of work in this contract shall be coordinated so that progress on each related work item will be continuous from week to week. The progress of the work will be reviewed by the Engineer at the end of each week, and if the progress on any item of work during that week is found to be unsatisfactory, the Contractor shall be required to adjust the rate of progress on that item or other items as directed by the Engineer.

The Contractor shall conduct operations in such a manner as will result in the minimum of inconvenience to occupants of adjacent homes and business establishments and shall provide temporary access as directed or as conditions in any particular location may require.

Access to adjacent residential, public and commercial properties shall be provided at all times during the contract period.

The Contractor shall restore to its previous condition as directed by the Engineer any private property, City property, or utilities damaged by its construction. No payment shall be made to the Contractor for any required restoration of private property, City property or utilities, unless otherwise noted.

SP-2.05 REFERENCE STAKES:

Add the following paragraph to General Provision Section G-8.03:

The Contractor shall, with no additional payment, furnish and install reference stakes at all even and half-stations along the project survey baseline.

These stakes shall be maintained for the duration of construction for the purpose of the Engineer's reference.

SP-2.06 CONTRACTOR'S WEEKLY SCHEDULE:

In order that the TSS personnel may be advised of the work to be performed, the Contractor may be required to submit weekly to the Engineer of its designated representative a schedule indicating the proposed work plan for the

forthcoming week. Such shall be delivered to TSS not later than Friday preceding the work plan week unless other arrangements have been made for this submittal.

SP-2.07 MONTHLY CONSTRUCTION ESTIMATES AND RELEASE OF LIEN:

The Contractor shall prepare on or about the first day of each month an estimate of the work completed in the preceding month. Said estimate shall be prepared on standard forms provided by the Engineer, and three (3) signed originals shall be provided by the Contractor. Any disputed quantities shall be adjusted as directed by the Engineer prior to each partial payment, as provided for in Article 10.05 of the Agreement.

Certification that all subcontractors have been paid for the previous month's work shall be submitted with each partial payment request on forms provided by the Engineer.

An update of the overall project schedule shall be submitted with each partial payment request.

SP-2.08 CONTRACTOR'S REPRESENTATIVE:

Add to Article 8.02 of the Agreement:

> "The Contractor shall submit in writing to the Construction Engineer the name of its duly authorized representative who will be present on the job during all work activities and is authorized to make decisions for the Contractor. Any change in the contractor's representative shall require written notification to the Construction Engineer prior to such change".

SP-2.09 NOTICE AND SERVICE THEREOF:

All notices, which shall include demands, instruction, requests, approvals, and claims, shall be in writing.

Any notice to or demand upon the Contractor shall be sufficiently given if delivered to the Contractor's representative at the construction site or to the office of the Contractor specified in the bid (or to such other offices as the Contractor may, from time to time, designate to the City in writing), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered, with charges prepaid, to any telegraph company for transmission, in each case addressed to such office.

All notices required to be delivered to the City shall, unless otherwise specified in writing to the Contractor, be delivered to the Engineer, 306 E. Jackson St., Tampa, Florida 33602, and any notice to or demand upon the City shall be sufficiently in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to said Engineer or to such other representative of the City or to such other address as the City may subsequently specify in writing to the Contractor or to its representative at the construction site for such purposes.

Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery or (in the case of mailing) when the same should have been received in due course of post or (in the case of telegram) at the time of actual receipt, as the case may be.

SP-2.10 CONTRACTOR'S FIELD OFFICE:

The Contractor will not be required to provide a Contractor's field office.

The Contractor, however, shall have Contract Documents, the latest approved working drawings, standard drawings and a representative of the Contractor available at the site during regular working days.

SP-2.11 ENGINEERING'S FIELD OFFICE:

An Engineering field office shall not be required for this project.

A functional, portable cellular telephone and separate lockable sanitary facilities shall be provided to the Engineer for use throughout the duration of the project.

All costs associated with the cellular telephone (local calls only) and sanitary facilities shall be borne by the Contractor. No separate payment shall be made for these services.

SP-2.12 DAMAGE TO ADJACENT STREETS:

Any streets (including detour routes) consisting of travel lanes, curbs, gutters and shoulders, outside the project area (not designated for construction), which are determined by the Engineer to have been damaged due to negligent construction related operations and/or equipment, shall be restored by the Contractor to its original or better condition without any cost to the City and to the satisfaction of the Engineer.

SP-2.13 PROJECT PHOTOGRAPHS:

The Contractor will not be required to furnish photographs of the project; however, the Engineer may or may not take photographs of the area immediately prior to and after completion of the construction for record and information. To assure that there will not be any conflict with this photography, the Contractor shall not perform clearing operations or actions which will disturb any street or area within the project until the Engineer has been advised thereof and has had adequate opportunity to perform the desired photography.

SP-2.14 PRECONSTRUCTION VIDEO:

Prior to commencing work, the Contractor shall submit to the Engineer for approval, a DVD containing a continuous color video recording including complete coverage of pre-construction conditions of all surface features within the construction's zone of influence, (including detour routes) simultaneously produced audio commentary and electronic display of time and date. The video recording shall be sufficient to fulfill the technical and forensic requirements of the project and provide continuous unedited coverage, establishing locations and viewer orientation with clear, bright, steady and sharp video images with accurate colors free of distortion or other imperfections. The DVD must be accompanied by a detailed log of its contents including date, locations, video counter numbers and features. No work shall be allowed until the completed DVD and log are approved by the Engineer.

Payment for this work shall be made under Mobilization.

SP-2.15 PROJECT CLEAN-UP:

Clean-up on this project is extremely important and the Contractor will be responsible for keeping the construction site neat and clean with debris being removed regularly as the work progresses.

If project cleanliness and/or dust control reaches an unacceptable level in the opinion of the Engineer, the Engineer will notify the Contractor in writing. If the Contractor does not act to correct the situation within 4 hours in the case of dust control or within 24 hours in the case of general cleanliness, the Engineer may call upon outside forces to provide the appropriate services. Cost of all such activities shall be charged to the Contractor via contract change order.

SP-2.16 CITY PERMITS:

The Contractor shall be responsible for obtaining all applicable City permits for this project. These can include but may not be limited to: Right-of-way permit(s), tree removal/site clearing permit(s), and drainage/earthwork permit(s). The Contractor shall supply any required plans or other information to the issuing department.

The time required to prepare, submit, review, and issue the permits shall be included in the contract time and no payment shall be made for any delay incurred by this process.

Cost for obtaining City permits shall be included in the lump sum cost for mobilization (Item No. 101-1), and no separate payment shall be made. Right-of-way permit fee shall be waived by the City.

All subcontractors working on the project shall obtain their own, separate permits as above.

SP-2.17 AS-BUILT PLANS:

The Contractor shall provide the Engineer with "As-Built" plans, as follows:

1. All As-Built information shall be annotated by a Florida Registered Professional Surveyor and Mapper on a separate layer of each AutoCAD drawing file as provided on a disk by the City. Annotation of the new drawing files shall be in accordance with City of Tampa TSS drafting standards, as well as the Standards of practice set forth by the Florida Board of Professional Surveyors and Mappers in chapter 5J-17 of the Florida Administrative Code, pursuant to section 472.027 Florida Statutes. Settings shall be as follows: Color: RED, Linetype: CONTINUOUS, Font: ROMANS, Layer Name: AS-BUILT, AutoCAD Menu Name: ACAD.MNU, and File Format: AUTOCAD Release 12.

2. All surveys shall be completed and certified by a Florida Registered Professional Surveyor and Mapper hired and/or employed by the Contractor, and shall be in accordance with the Standards of Practice set forth by the Florida Board of Professional Surveyors and Mappers in chapter 5J-17 of the Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. Survey data shall be submitted as an electronic data file in AutoCad latest version. The Contractor shall also include as supporting data the ASCII files of digital raw survey data, closure reports, adjustment reports, and/or copies of any hand-written field notes or sketches.

3. "As-Built", or "Record", surveys, as may be required by contract, or agreement, shall consist of survey data collected on all constructed improvements, so they may be compared to and contrasted with the design plans and/or construction drawings. The annotated disk shall delineate all changes and deviations to the planned improvements within the project limits, to include, but not be limited to, pavement, curb & gutter, sidewalk, driveways, inlets, manholes, all piping, inverts, ditches, ponds, valves, hydrants, water meters, signalization, hand holes, signing & pavement marking, landscaping, and irrigation. All changes and deviations shall be delineated by Station-Offset and vertical alignment values and shall be clearly shown on the drawing files.

4. The Contractor shall comply with the above requirements and shall submit one check print set of the plans at the same scale as the construction plans, and all the supporting survey data files, to the Engineer for review within three weeks of substantial completion of the project. Final payment for the project shall not be made until the As-Built information is received for review, any corrections are made, and approval granted by the Engineer. Upon approval, the Contractor shall provide the final As-Built drawings on the disk, at the same scale as the construction plans. These files shall be AutoCad Drawings or AutoCad Design Web Format and Adobe PDF

   The cost for this work shall be included in the contract price for Mobilization and no separate payment shall be made for meeting the above As-Built requirements.

SP-3.01 STREET CLOSURE AND MAINTENANCE OF TRAFFIC:

A City of Tampa permit for construction and maintenance operations within public Rights of Way will be required for every street, lane, or sidewalk closure within City of Tampa Rights of Way.

These permits will establish the requirements for the closure related to number of lanes and/or time of day lanes or street may be closed. The Contractor shall adhere to the requirements as described in the permit(s).

The Contractor shall furnish and maintain all necessary signs, pavement markings, barricades, lights, and flagmen necessary to control traffic and provide for safety of the public, all in compliance with the current Florida Department of Transportation Standard Plans for Road Construction and the FHWA Manual on Uniform Traffic Control Devices.

The Contractor shall observe traffic movements through the work site and inspect all traffic control devices on a regular basis to ensure that all devices are properly installed and functioning as intended.

In cases of closure for street, lane, or sidewalk on the City of Tampa Functionally Classified Network (collectors, minor arterials, and principal arterials), including all State Roads, the Contractor shall provide a maintenance of traffic plan to the City of Tampa, Transportation Division. This plan shall be provided at least seventy-two hours in advance of the closure (excluding weekends) and shall contain the following:

1. Proposed detour routes.

2. Signing of the complete construction area and detour routes.

Advance notice information signs advising the public of scheduled closure of major roadways and/or information signs advising the public of points of closure and detour routes may be required by the Engineer and will be installed at the Contractor's expense.

Payment shall be full compensation for all work, equipment, materials, tools, labor and any incidentals required to maintain safe traffic routes past the work site.

SP-3.02 TRAFFIC INFORMATION SIGNS:

The Contractor's attention is directed to Section 10 of the General Provisions, PROTECTION OF WORK AND PUBLIC, and to the consideration therein for providing informative signs indicating the street closures. It is the purpose of such requirements to adequately inform residents and the general public of the closure thereby creating better understanding and relations during the construction.

Street closure signs shall conform to the configuration and dimensions shown on page SIGN-2 which is hereby made part of these specifications.

SP-3.03 PROJECT SIGN:

The Contractor shall furnish 2 project sign(s) which shall conform to the general configuration and dimensions as per page SIGN-1 which is made a part of these specifications. The sign(s) shall be maintained in good condition until the completion of the project, and shall be located as instructed by the Construction Engineer.

The cost of furnishing and maintaining the signs shall be included in the various contract items and no additional compensation shall be made.

SP-3.04 TEMPORARY SIGNALIZATION:

The Contractor shall furnish all labor, materials and equipment required to provide and maintain operation of temporary signalization during all phases of construction until permanent signalization is installed and functioning properly. If a temporary communications interconnect is required, this will be stated on the signal plans.

The work includes all excavation, backfill, sheeting, shoring, bracing; installation of wood signal poles, guy wiring, signal heads and connecting hardware, span wire, messenger wire, signal cable, electrical service, wire and service

attachment, controller and pole mounted cabinet; relocation of signal equipment during construction phasing; and all other work and hardware incidental to providing and maintaining the operation of temporary signalization.

SP-3.05 NIGHT WORK: (NOT APPLICABLE)

SP-3.06 TEMPORARY TRAFFIC STRIPING: (NOT APPLICABLE)

SP-4.01 DENSITY REQUIREMENTS:

The subgrade, subbase and base densities shall be 98% of the Modified Proctor for all vehicular travel ways. The density requirements for asphaltic concrete and soil cement shall be 96% of the Laboratory Standard Proctor. All other locations shall attain densities of 98% of the Modified Proctor.

SP-4.02 STABILIZATION:

Type "C" stabilization, 12" thick shall obtain a minimum Florida Bearing Value (FBV) of 75 p.s.i.

SP-4.03 SOIL BORING INFORMATION: (NOT APPLICABLE)

SP-4.04 TEMPORARY STOCKPILING:

For temporary stockpiling of the excavated material within project limits (and anywhere within City limits) the Contractor shall follow the following procedure.

Public Right of Way

a. The Contractor will not be allowed to stockpile suitable, excavated material within right- of-way for a period in excess of 30 calendar days. Unsuitable excavated material shall not be stockpiled within public right-of-way for a period in excess of 7 calendar days.

Location other than Public Right-of-Way

b. The Contractor shall:

    1. Obtain the permission (in writing) from the owner of the property where stockpiling is desired.

    2. At its own expense present the above letter and a contour plan of the site to the TSS Construction Engineer for approval of stockpiling site.

    3. At the conclusion of the stockpiling activity, the Contractor shall obtain a signed letter of release from the property owner that he/she is completely satisfied with the stockpiling operation and with the restoration of their property. A copy of the letter shall be furnished to the Engineer.

The time periods of stockpiling shall be specified by the Contractor in writing.

Upon removal of stockpiled material, the Contractor shall clean up and grade the site to its original contours and conditions.

The City of Tampa shall not be a party to any agreement between the Contractor and private property owner(s).

Regardless of the location of stockpiling, it shall be the Contractor's responsibility to make sure that stockpiling in no way constitutes a public hazard, nuisance and does not interfere with the natural surface runoff in the area.

SP-4.05 DEWATERING:

Any dewatering related to this project will not be a separate bid item. The cost shall be included in the price of the facility being installed at that location and/or any related pay items.

SP-4.06 COMPACTION OF SUITABLE CLAY FILL MATERIAL:

The Contractor shall have equipment available to properly compact any suitable clay fill material at no additional cost to the City.

SP-4.07 IDENTIFIED AREAS OF CONTAMINATION:

If contamination is encountered, the Contractor shall employ his own firm or subconsultant Contamination Assessment/Remediation Contractor – CAR Contractor to perform contamination assessment and remediation working in the designated contamination areas. Activities may include but not be limited to the following types of work:

(1) Soil sampling.
(2) Earth work.
(3) Operating scientific field testing equipment.
(4) Installation and operation of equipment for dewatering.
(5) Installing sheet pile for cofferdams.
(6) Treatment of water to remove any contaminates.

A staging area may be required to facilitate the CAR Contractor's operations.

Where contamination assessment or remediation work is done simultaneously with the highway construction Contract, the assessment/remediation work period may or may not begin on the day highway construction begins and may or may not be consecutive working days. A schedule to accomplish the assessment/remediation work expeditiously will be established at the preconstruction conference. The Prime and His CAR Contractor will use this schedule as a basis for planning both work efforts. The Engineer must approve any deviation from this schedule before it occurs. Coordinate schedule changes with the CAR Contractor before approval by the Engineer.

Schedule operations to avoid intrusion into the encountered areas or staging areas reserved for the CAR Contractor until the established schedule dictate, unless agreed to by the CAR Contractor beforehand. Provide access to the aforementioned sites at all times during the assessment/remediation work phase. Resume normal operations in the designated area once the contamination is removed and notice to proceed is issued by the Engineer.

Contractor to provide all invoicing (testing, permit fees, application for meter, metering by gallon, soil prep etc.). This will be approved by the City Engineer from the contingency allowance, as encountered and needed.

SP-5.01 UTILITY PROTECTION CONSIDERATIONS:

The Contractor shall protect all utilities and other facilities within and adjacent to the construction as covered in Section G-1.03, unless a utility firm has conclusively indicated, or such is shown on the plans, that the certain adjustment, removal, reconstruction, or protection of the utility's facility will be performed by that respective utility.

The Contractor shall make every effort to protect all water mains. If the main is damaged or lost, the Contractor shall replace the affected line in strict accordance with the City of Tampa Water Department Specifications and Construction Standards, latest, edition, at no extra cost to the City, and he shall assure that service is maintained at all times.

The Contractor shall make every effort to protect all sanitary sewer lines. If the main is damaged or lost, the Contractor shall replace the affected line in strict accordance with the City Wastewater Department Specifications and Construction Standards, latest edition, at no extra cost to the City.

It will be the Contractor's responsibility to preserve all existing sanitary sewer services without interruption during the construction of storm sewers or the repairs or reconstruction of sanitary sewers.
When the construction of storm sewers, repair or reconstruction of sanitary sewers has been completed, all temporary connections shall be removed. Sewers shall be cleaned of all settled solids.

The cost of handling sanitary sewers during construction, including cost of all labor, materials, and equipment or other items incidental to completing the job, shall be included in the contract price as bid for the contract items and no separate payment shall be made.

It will be the Contractors responsibility to preserve all existing ditches, swales, force main, gravity main, laterals, etc., and other stormwater appurtenances and facilities pertaining thereto whether owned or controlled by City, other governmental bodies or privately owned by individuals, firms or corporations.

Any temporary measures constructed shall first be approved by the Engineer. The cost of such temporary measures shall be included in the contract price bid for storm sewer items and no separate payment shall be made.

The Contractor shall furnish, install, and remove sheeting and shoring and other protective measures as may be necessary to satisfactorily accomplish the construction of this project. The cost of such sheeting and shoring and other protective measures shall be included in the unit prices as bid for the storm sewer items and no separate payment shall be made.

Compensation for steel sheeting and shoring furnished, installed and removed shall be paid for as extra work in accordance with Article 7.02, EXTRA WORK, on Page A-18 of the Tampa Agreement when approved for use by the Engineer. Such approval shall be for its use only, and the Contractor shall have full responsibility for the design, installation, and removal of the sheeting and shoring. The Contractor shall obtain the services of a registered Professional Engineer to design and certify the sheeting and shoring plans.

SP-5.02 ADJUSTMENT OF UTILITIES AND PUBLIC SERVICE INSTALLATIONS:

Storm and sanitary sewer manhole covers, valve covers or boxes, water meter boxes, and vaults located within the limits of construction of the pavement or sidewalk area to be constructed, reconstructed or overlaid shall be relocated or adjusted by the Contractor to conform with the new pavement or sidewalk elevation as a part of the work of constructing or reconstructing the pavement or sidewalk and no separate payment will be provided therefor.

Appurtenances of other utilities will be relocated or adjusted by the utility company owning or having jurisdiction over the respective utility.

SP-5.03 REMOVAL OR ADJUSTMENT OF PUBLIC UTILITIES:

The City will make necessary arrangements with public utility owners, other than City of Tampa Water and Sanitary Sewers, for removal or adjustments of existing utilities, whether shown or not shown on the plans, where such removal or adjustment is determined by the Engineer to be essential to the performance of the required construction, provided normal construction procedures are used by the Contractor.

Relocations or adjustments requested by the Contractor on the basis of the use of a particular method of construction or a particular type of equipment shall not be considered as being essential to the construction of the project if other commonly used methods or equipment could be employed without the necessity of relocating or adjusting the utility. The Engineer will determine the responsibility for any such adjustment of utilities.

Relocations or adjustments requested for the Contractor's convenience or because of delivery of materials to the job site shall be the responsibility of and at the expense of the Contractor.

The Contractor shall be required to coordinate its activities with relocation work by the utilities. A schedule for relocation work will be presented to the Contractor at the pre-construction conference. This schedule may be

adjusted to "fit" the Contractor's proposed schedule, but it will include periods during which the Contractor's ability to perform work in the relocation area will be limited, with no additional compensation.

SP-6.01 USE OF CITY WATER SYSTEM:

A City of Tampa Water Department portable meter shall be utilized when obtaining water from the City system.

SP-6.02 WATER MAIN CONSTRUCTION AND/OR OFFSET:

The work specified consists of the offset and/or construction of water mains, tees, fittings, valves, valve box, thrust blocks, joint restraints, hydrants, and other related appurtenances in conformity with the location, lines, and grades shown in the plans or as directed by the Engineer. All materials and workmanship shall be in accordance with City of Tampa Water Department Technical Specifications and Construction Standards and Materials Specifications, latest edition and are available from the City of Tampa Water Department.

The Contractor's shall notify citizens subject to interruption of service at least 24 hours in advance. The Contractor is further required to make this notification in writing, providing the following information in addition to the starting time and duration of interruption:

1. Contractor's name, address, and telephone number.
2. Name of Contractor's project superintendent and telephone number(s) which allow 24- hour per day contact.
3. Name of the Engineer and telephone number(s) which all 24-hour per day contact.
4. Name of City of Tampa Water Department Engineer and telephone number(s) which allow 24-hour per day contact.
5. Data and time of notification.
6. A written log of addresses notified.

The written notification should be in such format as to be easily affixed to the structure, such as a "hang tag", should no citizen be in the building at the time of notification.

All newly laid pipe, including fittings and valves shall be pressure tested in accordance with AWWA Standard C 600 and current City of Tampa, Water Department standards. Not less than three (3) days notice shall be given prior to start of such tests, and such testing shall not be included until preliminary testing by the Contractor has indicated that the test section is ready for testing. The schedule and procedures for testing shall be determined by the Contractor and reviewed with the City of Tampa Water Department's Construction Engineer prior to testing.

Concurrently with pressure testing, pipelines shall be subjected to leakage tests. Leakage measurements shall not be started until a constant test pressure has been established in excess of 150 psi and not greater than 190 psi. The duration of each leakage test shall be at least two hours and the test pressure shall be as specified for the pressure tests.

Before the system is put into operation, all potable water mains and appurtenances and any item of new construction with which the water comes in contact shall be flushed, pressure-tested and disinfected. Prior to disinfection, the lines shall have been "pigged" and flushed to remove all sand and other foreign matter. The lines shall be disinfected in accordance with the applicable requirements of AWWA Standard C 601.

Upon completion of the hydrostatic test and disinfection, the Contractor shall contact the City of Tampa Water Department Inspection Division requesting a bacteria test. The Contractor shall install sample taps on the new main and at the end of each new branch of the piping system. The City of Tampa Water Department will pull a water sample on two consecutive days allowing 24-hours for each sample to be analyzed and processed.

If samples do not demonstrate satisfactory results, the disinfection procedure shall be repeated until two (2) consecutive sets of satisfactory samples are obtained. The period between such series of samples shall be a minimum of 24 hours.

After completing the testing and disinfection and regardless of ground conditions, all samples taps and corporation stops shall be removed from the pipe and replaced with tapered brass plugs.

SP-6.03 WATER SERVICE CONNECTIONS:

The Contractor shall provide all labor, equipment and materials to transfer existing 3/4" (single or dual service), 1", 1 1/2", or 2" meter services to newly installed water mains and/or adjust the location of the meter as shown on the Plans, specified, and directed by the Construction Engineer.

The transfer of existing meter services shall include but may not be limited to, all excavations; dewatering and sheeting and bracing where required or as directed by the Engineer; furnishing and installing steel casing pipe for long-side meter service including jacking and boring casing pipe, if required; making all necessary taps; making all necessary adjustments to relocate the meter and relocating the meter service to a new location, furnishing and installing the appropriate corporation stop, curb stop, pipe couplings, and transition pieces; all copper tubing compacting the excavations; cleaning up and restoring the job site including re-grading the terrain; replacing all galvanized and polybutylene service lines found during construction with new copper service lines.

The Contractor shall provide all new materials for completing transfers unless otherwise directed by the Construction Engineer. The City reserves the right to evaluate each long-side transfer and to declare it as a short-side transfer based on the following criteria:

1. The existing long-side service to be transferred has a service line in an acceptable condition. The existing service line is extended for a distance of 0 to 20 feet as measured horizontally from the point of coupling to the closest edge of the meter box.

When reference is made to short-side or long-side services they shall be defined as:

1. Short-side: A service line installed for a distance of 0 to 20 feet as measured horizontally from the center line of the water main to the closest edge of the meter box.

2. Long-side: A service line installed for a distance greater than 20 feet as measured horizontally from the center line of the pipe to the closest edge of the meter box.

   If crossing roadway, Schedule 40 steel or Schedule 80 PVC casing pipe shall be used.

SP-7.01 SANITARY SEWER CONSTRUCTION:

The work specified consists of the construction of sanitary sewer mains, fittings, tees, manholes, and other related appurtenances in conformity with the locations, lines and grades as shown in the plans.

At least 3 weeks prior to construction the Contractor shall notify the Engineer and the City of Tampa Wastewater Department Field Engineering Office (813-274-8070) and supply them with all required shop drawings, starting date, projected schedule and other information as required.

Depending on the type connection, one or more of the following certificates/shop drawings will be required:

1. DIP or PVC certificate of manufacture.
2. Manhole shop drawings and strength report.
3. Frame and cover shop drawings.
4. Flexible coupling shop drawings.
5. Casing pipe certificate.
6. Jacking pit detail.
7. Crushed stone submittal.
8. Valve shop drawing.

9. Manhole drop connection detail.

The Contractor must notify the City Wastewater Department Inspection Division, phone (813) 274-8070 at least five (5) days prior to beginning construction. Prior to construction, all required shop drawings and submittals shall have been approved by the City Wastewater Department. Any materials installed prior to approval of shop drawings or submittals will be removed at the Contractor's expense.

The City Wastewater Department will periodically visit the project site to make a visual inspection of the progress of the work and methods of construction. Upon observation of work not done in accordance with the plans and specifications, the City Wastewater Department will notify the Contractor and TSS Department and require necessary corrections be made or tests performed to assure compliance with the specifications, at no cost to the City.

The City Wastewater Department shall be notified in writing when the sanitary sewer installation is complete. Within two weeks of receiving a written request for final inspection of the completed work, the City Wastewater Department representative shall perform the final inspection and by letter shall notify the Contractor and the TSS Department of the results of the inspection.

The City will require the Contractor to perform the required tests to assure that all pipe installed meets the City's infiltration/ exfiltration rates and/or allowable pressure losses. It is required that the Contractor retain a City Wastewater Department approved test lab to perform go/no-go deflection testing of PVC gravity pipe as specified in the City Wastewater Department PVC Gravity Pipe Specifications. The appropriate tests depend on whether gravity pipe or force main pipe has been installed. The City Wastewater Department inspector shall be notified three working days prior to testing procedures. A letter certifying completion and results of the tests and compliance with City standard must be submitted by the Contractor.

The Contractor shall perform an infiltration/exfiltration test on all gravity sewers and a pressure test on all force mains (as applicable) in accordance with City of Tampa regulations. Said tests are to be certified by an Engineer and submitted to the City Wastewater Department for approval.

Television inspection of gravity lines will be performed by the City. The television inspection shall be done only after the pipelines have passed both leakage and deflection tests and a stabilized base for the television trucks to drive on is established. This final inspection is performed to assure that pipe constructed with changes in slope between manholes (dips) and/or other irregularities are not going to be transferred to the City for ownership and maintenance.

All shop drawings submittals, pipe and other material specifications, required marking of force mains, testing, workmanship, etc., shall be as required by current standards and specifications in use by the City Wastewater Department.

SP-7.02 SANITARY SEWER HOUSE LATERAL EXTENSION: (NOT USED)

SP-8.01 FILLING LOW AREAS WITHIN CITY LIMITS:

The Contractor under Sec. 21-27 (Permit Requirements) of the City of Tampa Code is prohibited from filling any area public or private (except where shown on the construction plans) within the project limits or any where within the City limits without a permit.

For filling and/or grading any area, the owner of such area shall obtain a permit from the Stormwater Management Division, Wastewater Department, City of Tampa. The owner shall submit existing and proposed contour plans of the area to be filled and the adjacent land for determination if a permit could be issued. Drainage patterns can not be altered to the detriment of neighboring property owners or public rights-of-way.

Concurrently the permit application will be reviewed by the Parks Department.

The Contractor shall not deposit any fill material within the City limits without an approved permit. A copy of the permit shall be submitted to the Engineer, by the Contractor prior to any filling or grading operation.

SP-8.02 ENVIRONMENTAL PROTECTION:

The Contractor will be held liable for the violation of any and all environmental regulations. Violation citations carry civil penalties and in the event of willful violation, criminal penalties. The fact that the permits are issued to the City does not relieve the Contractor in any way of its environmental obligations and responsibilities.

SP-8.03 CONFLICT STRUCTURE: (NOT APPLICABLE)

SP-8.04 REINFORCED CONCRETE PIPE/BOX:

All reinforced concrete pipe, reinforced concrete arch culverts, storm drain, and sewer pipe, all reinforced concrete elliptical pipe and all pre-cast reinforced concrete box sections shall be inspected and accepted by a testing laboratory approved by the Engineer.

Each pipe/box shall bear the stamp of acceptance of the testing laboratory and the Engineer shall be supplied with a copy of each inspection report, including a certification of "D-load", absorption test and conformance to the dimensional and all other designations of ASTM specifications. The cost of such inspection services shall be included in the unit prices for the respective pipe/box items.

Unless specified otherwise on plans, or directed by the Engineer, all storm sewer and culvert pipes shall be ASTM Class III, B wall thickness. All steel shall be grade 60.

All joints in elliptical concrete pipe and round R.C.P. shall be provided with filter fabric or concrete jacket as per F.D.O.T. Standard Plans Index No. 430-001 and as directed by the Engineer. Filter fabric shall be provided at all joints, except the last two joints not supported by a structure; these joints shall be provided with a concrete collar.

The cost of the filter fabric jackets and concrete collars shall be included in the unit cost of pipe. No extra payment will be paid for such jackets or collars.

All round and elliptical reinforced concrete pipe and all pre-cast concrete box sections shall be manufactured and installed without lift holes. The Contractor shall install the pipe/box with the use of slings, hooks or other methods approved by the Engineer.

All round and elliptical reinforced concrete pipe shall be manufactured without visible corrugations on the internal wall. Any pipe with visible corrugations on the internal wall shall be rejected.

SP-8.05 CONSTRUCTION OF PAVED SUMP BETWEEN INLET AND EDGE OF PAVEMENT:

Whenever the plans indicate construction of a modified inlet, the Contractor shall construct a standard curb inlet with a concrete apron as shown in the details, the addition of the concrete apron being the only distinction between a standard inlet and a modified inlet.

If the edge of the concrete apron will be located immediately adjacent to the edge of existing asphalt pavement, and that pavement is not to be repaired or replaced as part of the construction, the Contractor shall saw cut the asphalt pavement to provide a neat clean edge and the concrete apron shall use that edge as part of the form.

If the edge of the concrete apron does not touch the edge of existing pavement, the Contractor shall construct a transitional apron, with 3:1 mitered edges, to connect the edge of the concrete apron to the edge of pavement. This transitional apron shall be constructed of the same material composition as the existing pavement.

All costs to construct the required concrete apron and any required transitional apron shall be included in the contract bid item of that modified inlet and no additional payment shall be made.

Wherever the plans indicate an inlet, either curb or grating type, to be placed outside the edge of existing pavement or curb limit so as to be in proper position for future street widening, the Contractor will be required to construct a paved sump between the edge of such existing pavement and inlet opening. The type of pavement for such sump areas shall be similar and equal to that of the adjacent roadway to which it is connected. Payment shall be made under the applicable items for street replacement.

SP-8.06 DRAINAGE STRUCTURES:

1. All inlets and manholes shall, unless otherwise directed by the Engineer, be constructed as per design plans and applicable design standards. All manholes shall be Traffic Bearing type. It shall be the responsibility of the Contractor to assure that the designated sizes of the drainage structures meet the following criteria:

    a. The minimum distance from the top of the opening for the highest pipe to the bottom of the top slab shall be ten inches (10"); 12"+ from top of pipe to bottom of top slab, before "stack" is used.

    b. The minimum diameter for stacks shall be as follows:

        Twenty-four inches (24") for four feet (4') heights, Thirty-six inches (36") for four feet (4') to six feet (6') heights, and Forty-eight inches (48") for heights over six feet (6').

        The stacks shall be symmetrical about the openings, five inches (5") minimum wall thickness, reinforced, and keyed (unless constructed of brick) as per the appropriate FDOT standard.

    c. The minimum distance between pipe openings shall be nine inches (9").

    d. For four-sided structures having openings in one or more corners, individual shop drawings must be submitted for prior approval.

2. If warranted by field conditions and directed by the Engineer, the Contractor shall, at such locations, construct rectangular brick drainage structures (in place of concrete drainage structures), according to the standards specified below:

    Brick construction shall be as follows:

    a. Wall thickness minimum eight inches (8") up to eight feet (8') height, unless specified otherwise.

    b. Wall thickness minimum twelve inches (12") up to twelve feet (12') height, unless specified otherwise.

    c. Brick shall be laid in 1:2 (Portland cement-sand) mortar.

    d. Before laying the bricks in mortar, the bricks shall be thoroughly sprinkled with clean water (not to saturation extent).

    e. Brick for manhole and inlet structures shall be laid in stretcher courses, with every sixth course a header course.

    f. All brick structures shall be plastered smooth inside and outside with 1/2" thick, 1:2 (Portland cement-sand) mortar.

g. No "unsound" brick shall be used. As a test, if a light hammer blow, with the brick held lightly in hand, does not produce a uniform crisp ringing sound, the brick shall be construed to have crack(s), or otherwise unsound and shall be rejected.

h. All bricks shall be solid clay.

3. No additional compensation shall be paid for brick structures.

4. For all types of manholes, the top and bottom slabs shall be as per applicable D.O.T. standards, even if brick is allowed to be used in the manhole walls. The following criteria shall apply to slab thicknesses and steel reinforcements:

a. Top and bottom slabs shall have the same thicknesses and reinforcements in any manhole structure.

b. The minimum slab thickness and reinforcement shall be: 8" thick and #6 bars at 6" centers both ways.

c. 4'x6' or larger manholes including circular manholes with inside diameter of 5.0' or larger shall have 10" thick slabs with #7 bars at 6" centers both ways.

d. Unless specified on the plans, four sided structures with both inside dimensions in excess of 8.0' and circular structures with inside diameter in excess of 8.0' shall not be covered by D.O.T. and the above criteria.

5. All grate inlets shall conform to the City of Tampa design standards.

6. Grates on inlets, as well as all other structures, shall be Traffic Bearing Type, unless specified otherwise, and subject to approval of the Engineer. All grate inlets shall be fitted with an approved metal frame at the top to seat the grates.

7. All Type-P manholes shall be bid at one average unit price regardless of size and shape. Similarly, all Type-J manholes will be bid at one average unit price regardless of size and shape unless indicated otherwise in the proposal.

8. Vertical support columns (one in case of Type 5 inlet) shall be constructed by the contractor, as a part of the D.O.T. Type 5 and 6 curb inlets, where and as directed by the Engineer.

9. The Contractor, if so directed by the Engineer in order to better meet site requirements, shall construct B-S-1, B-R-2, B-V-1, or B-R-1 type curb inlets in lieu of D.O.T. Type 5 and 6 curb inlets and vice-versa without additional cost to the City. P-5 and P-6 inlets shall have 3'-6" x 3'-6" substructures unless oversize pipe is to be accommodated or otherwise directed by the Engineer.

Side openings in curb and grate type inlets may be specified in the plans to meet site conditions. The Contractor shall provide such opening without any additional cost.

10. When precast drainage structures are requested as substitutions for poured in place concrete structures, Contractor shall meet the following additional requirements:

a. Minimum height of the base structure (manhole or inlet barrel) unless restricted by design, shall be 5'-0" before extending the structure height by another precast "barrel". The minimum height of the top (extension) precast "barrel" shall be 1'-6". "Barrel" extensions of less than 1'-6" height shall be cast in place with continuous reinforcement.

b. Four-side structures may be considered as an alternate to circular structures, but not the reverse.

c. For City type curb inlets, unless specified otherwise, directed by the Engineer, or to accommodate larger pipes, the Contractor may use 3'x4' (inside dimensions) substructures. This structure shall have same slab and wall thicknesses and steel reinforcing as specified for "Type E" grate inlet.

d. When circular structures are precast in accordance with ASTM C478, the following limitations will apply:

(i) Maximum inside diameter shall not exceed 96".

(ii) Minimum wall thickness for 42" and 48" diameter substructures shall be 6"; 7" for 72" diameter, 8" for 84" and 96" diameters.

(iii) Vertical reinforcement in walls shall be equal in area to the required circumferential reinforcement area. Reinforcement spacing shall not exceed 12" O.C. in either direction.

e. The location of the pipe holes and adequate basic substructures height, unless directed otherwise by the Engineer, shall be the responsibility of the Contractor.

f. Contractor shall submit shop drawings only as specified below:

(i) One each-typical for different type of structures.

(ii) For structures directed by the Engineer, and/or requiring change with respect to design plans, or as otherwise required by these specifications.

g. No compensation shall be paid to the Contractor for precast drainage structures which are unusable due to site conditions or changes in plans.

h. Provide material testing acceptance reports by a licensed private laboratory verifying:

(i) That the structures were constructed in accordance with detail shown on the plans and/or typical Drawings.

(ii) Specific reference shall be made to the exact design criteria adhered to; if more than one, identify which criteria applies to which structures.

(iii) Identify the project title, project number, file number, date cast, structure, plan sheet number and station.

(iv) Reinforcement size, spacing, amount and cover.

(v) Concrete placement, curing and strength.

(vi) The testing laboratory stamp shall be placed on each structure prior to shipment.

11. All manhole and inlet structures shall be set on a minimum of a six inch thick layer of compacted number 57 size coarse aggregate unless noted otherwise in the plans or specifications or unless the Engineer determines a thicker layer is required due to soil and/or water conditions.

Payment for the six inch thick layer of stone shall be included in the price of the structure. Payment for thicker layers of stone shall be from the Selected Bedding Material (Stone) pay item, if available, or as extra work.

SP-8.07 RIP-RAP:

Bags made from synthetic fiber or material shall not be used for sand-cement rip rap. The preferred bag material is jute.

Filter fabric shall be placed behind (adjacent to the soil) wherever rip rap is constructed.

SP-8.08 STANDARD FOR FILTER FABRIC:

Unless specified otherwise on the plans, filter fabric shall be nonwoven fabric per F.D.O.T. Specification Sections 514 and 985. Payment for furnishing and placing the filter fabric shall be included in the contract price for the item or items to which it is incidental.

SP-8.09 CONNECTION TO EXISTING INLET OR MANHOLE:

The Contractor shall furnish all labor, equipment and materials required to connect the proposed pipeline into existing inlet or manhole as shown on the Plans, specified, and directed by the Engineer.

The work includes all excavation, dewatering, breaking into the existing structure, closing of the existing slot, removal and disposal of rubble and excess materials, installation of storm sewer pipe, sealing the voids around the pipe, backfilling, compacting and all other work incidental to connection to existing inlet or manhole.
Payment shall be made under:

SP-8.10 EROSION CONTROL PLAN:

In addition to the requirements of Section 104, the Contractor shall be required to submit an erosion control plan to the Engineer at the time of the preconstruction conference. The erosion control plan shall indicate in detail all measures proposed by the Contractor to meet its erosion control obligations, including all items required to meet permitting conditions for the project. Any phasing of the erosion control plan shall also be shown.

The cost of providing, revising and updating the erosion control plan shall be included in the unit costs of the various contract items and no separate payment shall be made.

SP-8.11 CONCRETE STRUCTURES AND CONCRETE BOX CULVERTS: (NOT APPLICABLE)

SP-8.12 DRAINAGE STRUCTURE AND PIPE BEDDING:

The Contractor shall furnish and install a two-foot thick foundation rock bed consisting of #57 FDOT stone under all stormwater inlets, manholes, and mitered end sections. Foundation rock shall be fully wrapped with filter fabric.

The Contractor shall furnish and install pipe bedding consisting of #57 FDOT stone or other crushed stone material as approved by the Engineer under all stormwater pipes 30 inches in diameter or greater and under all equivalently sized elliptical stormwater pipes. Bedding material shall extend below and beside the pipe as shown in the typical section of the plans, and shall be fully wrapped with filter fabric.

Payment shall be full compensation for all materials, equipment, labor, and any incidentals necessary for placement of the foundation rock and/or pipe bedding. Payment for the furnishing and installation of filter fabric shall be included in the unit price bid for bedding material.

SP-9.01 EXISTING SIDEWALKS, DRIVEWAYS AND PARKING AREAS:

The Contractor shall meet existing sidewalks, driveways and parking areas (concrete or asphalt) when possible with the proposed street replacement. At locations where existing sidewalks and driveways are not at the same

elevations as the new grades, the Contractor may be required to reconstruct a portion of the sidewalk or driveway as directed by the Engineer. (When existing driveway is of asphalt type, a base of 6" thickness shall be constructed with a 1" thick asphaltic concrete surface course.)

Payment will be as per the applicable contract unit bid prices for concrete sidewalk 4", concrete driveway 6", 6" base, and asphaltic surface course. There will be no payment if existing sidewalks or driveways must be reconstructed due to negligence of the Contractor.

SP-9.02 PRIME/TACK COAT:

The bid unit prices for Asphaltic Concrete shall include the bituminous material for prime/tack coat.

SP-9.03 PAVEMENT REPLACEMENT AND TOTAL RESTORATION:

No partial payment will be made for drainage structures, i.e., manholes, inlets, outfall structures, etc., and sanitary sewer, water or other reconstructed facilities until the total street replacement and complete restoration have been finished and accepted.

The limerock base shall be sealed and covered in accordance with F.D.O.T. Specifications, Section 300-2.2. Bare sand cover material will not be allowed unless the surface paving is scheduled and committed to be done no later than one week after the sealing. The Contractor shall keep the cover material surface in good condition and will not receive extra compensation for the cover material.

SP-9.04 CONCRETE CURB OR CURB-AND-GUTTER:

Expansion joints in concrete curb or curb-and-gutter shall be placed at all inlets, radius points, horizontal and vertical points of intersection (P.I.'s), and as otherwise directed by the Engineer. They shall be located at intervals of 100 feet between other expansion joints or ends of a run.

SP-9.05 ASPHALT LEVELING COURSE:

The Contractor shall provide Superpave Asphaltic Concrete Leveling as directed by the Engineer. This item shall be used on an as-needed or contingency basis, and shall be furnished and installed by the Contractor at a unit price per ton.

SP-9.06 PAVEMENT MIX DESIGNS:

The Contractor shall submit to the Engineer a mix design which has been approved by the FDOT within the previous twelve months, and which has been assigned an FDOT Quality Assurance Number, for each type of asphaltic pavement to be used on the project. The Engineer may, at its discretion, approve mix designs not meeting the above stipulations.

SP-9.07 USE OF RECLAIMED ASPHALT: (NOT APPLICABLE)

SP-9.09 PEDESTRIAN RAMPS:

All pedestrian ramps constructed in new sidewalk under Section 522 of the Standard Specifications shall comply with FDOT STANDARD PLANS Index No. 522-002 and 522-001, except that Detectable Warning Strips, a.k.a., domes, shall be provided by vendors/manufacturers that are on the FDOT's Qualified Products List (QPL).

SP-10.01 GRASSING AND/OR SODDING:

Lawn, road shoulders, and all areas that do not have well established grass at the time of construction and are disturbed during construction may be grassed, as directed by the Engineer. All areas shall be properly prepared by

removal of construction debris and rocks, and soil preparation and fertilization or placement of topsoil as directed by the Engineer. Lawn, road shoulders, and other locations where construction shall occur that are well maintained and show healthy grass at the time of construction, or where otherwise directed by the Engineer, shall be sodded with either Pensacola or Argentine Bahia Type or St. Augustine type sod as applicable.

All areas that have a potential for being eroded by flowing surface water shall be sodded as directed by the Engineer including 2' adjacent to the new pavement edges.

SP-10.02 TREE REMOVAL: (NOT APPLICABLE)

SP-10.03 LIVE OAK TREES: (NOT APPLICABLE)
SP-10.04 ROOT PRUNING: (NOT APPLICABLE)

SP-10.05 TRANSPLANTING TREES: (NOT APPLICABLE)

SP-10.06 RESTORATION OF LANDSCAPING WITHIN RIGHT-OF-WAY:

The Contractor shall remove any shrubbery, trees less than 5 inches in diameter, other landscaping, walkways, planters, other landscaping, and irrigation systems which are in conflict with the proposed construction. These items shall be restored, relocated, and/or reconstructed as shown in the plans or as directed by the Engineer.

Cost of removing, restoring, relocating, and reconstructing the above items shall be included in the lump sum price for Clearing and Grubbing, and no separate payment shall be made.

SP-10.07 TREE PROTECTION:

Tree barricades shall be constructed and maintained at trees indicated on the plans as "to be protected" and/or as directed by the Engineer. Generally, barricades are to be placed ten (10) feet from the trunk of each protected tree.

Barricades shall be constructed of commercially available pine lumber, as follows: Vertical members shall be 2" x 2" or larger, generally spaced twelve (12) feet apart. Horizontal members shall consist of one (1) 1" x 2" board.

The Contractor shall provide the services of an approved licensed tree professional when it is necessary to trim or cut a branch from a tree.

Payment for tree protection and tree cutting or trimming shall be included in the lump sum price bid for mobilization and/or clearing and grubbing and no separate payment shall be made.

SP-10.09 TREE TRIMMING:

In addition to Tree Trimming required in the FDOT Standard Specification Section 110, the Contractor shall trim tree limbs and shrubbery to a height of 8 feet above sidewalks and to the right-of-way in the project area, and as directed by the Engineer.

Cost of trimming and disposal of these items shall be included in the lump sum price for Clearing and Grubbing, and no separate payment shall be made.

SP-11.02 USE OF EXPLOSIVES: (NOT APPLICABLE)

SP-11.03 EXISTING PUBLIC FACILITIES:

Existing public facilities that are removed by construction operations under this contract shall be replaced by the Contractor to City of Tampa specifications. These items shall include all public benches, light poles, shelters,

roadway signs, etc., and replacement of these items shall be considered incidental to the cost of construction and no separate payment will be made.

SP-11.04 METAL PRODUCTS:

All metal products incorporated into the project must be tested by and found to conform to applicable specifications by an approved private testing laboratory prior to use on the project. These acceptance reports must also be made available to the Construction Engineer and to be placed in its office file prior to use on the project.

SP-11.05 WATER FOR DUST CONTROL: (NOT APPLICABLE)

SP-11.09 CONCRETE BLOCK RETAINING WALLS WITH CONCRETE FOOTING: (NOT APPLICABLE)

SP-11.10 MAILBOX RELOCATION:

All mailboxes within the limits of construction shall be removed and reset or relocated to allow access for mail delivery as directed by the Engineer.

SP-11.11 SIGNALIZATION CONDUIT:

Payment for "Conduit Under Pavement" shall be made for any conduit placed in an area outside the limits of clearing and grubbing and which requires pavement removal and restoration, whether the pavement is flexible (asphalt) or rigid (concrete). Payment for backfill, compaction and pavement restoration shall be included in the unit price for Conduit Under Pavement, and no separate payment shall be made.

Payment for "Conduit Underground" shall be made for any conduit placed in an area which does not require pavement restoration, or which is within the limits of clearing and grubbing. Payment for backfill, compaction, and non-pavement surface restoration shall be included in the unit price for Conduit Directional Bore, and no separate payment shall be made.

Any conduit described as "Additional Conduit" shall refer to conduit placed in the same trench as other conduit, whether it is "Under Pavement" or "Underground".

SP-11.12 RESTORATION OF MONUMENTATION:

The Contractor shall, with no additional payment, re-establish any permanent survey or mapping monumentation which is disturbed or destroyed in the course of the construction project.

SP-11.13 INSTALLATION OF SIGNALIZATION POLES AND MAST ARMS:

The Contractor shall install traffic poles and mast arms as indicated in the plans and as directed by the Engineer.

Nuts, bolts, washers and any incidental hardware required for attachment of the poles to the foundations shall be furnished by the Contractor.

The Contractor shall furnish and install the concrete base and install the pole and mast arm assembly.

Payment shall be full compensation for all work, equipment, tools, hardware, labor and any incidentals required to load, pick up, deliver and install the pole and mast arm assemblies.

SP-11.14 SIGNALIZATION CONTROLLER AND CABINET:

The Contractor shall provide the signalization controller and cabinet for installation. The controller and cabinet shall include the actuated solid state controller assembly, loop detectors, telemetry transceiver, the standby system relay, internal wiring and all required internal appurtenances. .

The Contractor shall construct a concrete base for a Type V cabinet, shall install the controller and cabinet on the slab and shall connect all external signalization wiring to the controller for operation.

Payment shall be full compensation for all work, equipment, tools, labor and any incidentals required to install the controller and cabinet.

SP-11.15 VEHICULAR TRAFFIC SIGNAL ASSEMBLIES:

All LED's incorporated in signal displays shall be manufactured with "Al InGap" technology.

SP-11.16 CONTINGENCY ALLOWANCE:

Payment from the City Contingency Allowance shall be made only at the direction of the Engineer under:

Item No. 999-25	Initial Contingency	L.S.

CITY OF
TAMPA, FLORIDA

NOTICE TO BIDDERS, INSTRUCTIONS TO BIDDERS
PROPOSAL, BID BOND, FORM OF NOTICE OF AWARD,
AGREEMENT, PERFORMANCE BOND AND
SPECIFICATIONS

FOR

Contract 19-C-00046

46th Street from SR 580 (Busch Blvd) to SR 582 (Fowler Ave) Bike Lane/Sidewalk

437246-1-58-01

City of Tampa
CONTRACT ADMINISTRATION DEPARTMENT
TAMPA MUNICIPAL OFFICE BUILDING
306 E. JACKSON STREET - 4TH FLOOR NORTH
TAMPA, FLORIDA 33602

JULY 2020

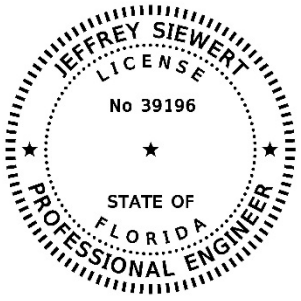
July 10, 2020
PREPARED BY: Maria Baucom/Jeffrey Siewert

SPECIFICATIONS PACKAGE
Contract Number: 19-C-00046
FINANCIAL PROJECT ID(S).437246-1-58-01
FEDERAL FUNDS
DISTRICT SEVEN
HILLSBOROUGH COUNTY

The applicable Articles and Subarticles of the General Requirements & Covenants division (Division I) of the July 2020 edition of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction are added, and all of the Construction Details and Materials divisions (Division II & III) are revised, as follows:

This item has been digitally signed and sealed by Jeffrey Siewert on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Date: _____
State of Florida,
Professional Engineer, License No.: Jeffrey Siewert, P.E. 39196
Firm Name: Ayres Associates Inc
Firm Address: 8875 Hidden River Parkway, Suite 200
City, State, Zip Code: Tampa, Florida 33637
Certificate of Authorization Number: 4356
Page(s): 1-33



Ingenuity, Integrity, and Intelligence.

June 23, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information.
The question and response are below.

Question 01 Per project plans cross sections, a lot of ditches will require to be filled with dirt to bring it to grade. There is no pay item (embankment) to compensate contractor for this work

Response 01

Any embankment required is incidental to the proposed stormwater system and generated by the 'Furnish & Install" of the proposed stormwater pipes and inlets. The legend on roadway plans sheet numbers 13-14 indicates remove and replace existing sod over the proposed pipes. Spot grades are given. Please refer to the Special Profiles on roadway sheet numbers 27-28. The intent is to replace the existing swale with a proposed swale to connect the proposed ditch bottom inlets, structures S-5 thru S-14. Please also refer to the Drainage Structure Sheet numbers 33-37.
A Pay Item Note has been added to roadway sheet numberSQ-1.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 7, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 2

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01 Is a construction sign required?

Response 01 City requires two construction signs on all projects, including this one, see SP-3.03. Project Sign and the details. Pgs. 170-171 of the bid package.

Question 02 The typical section on plan sheet 5 shows 9" of colored cement concrete pavement. Under what bid item is this paid for?

Response 02 Pay Item 0350 3 7 Plain Cement Concrete Pavement 9" also note Pay Item 0523 1 Patterned Pavement, Vehicular Areas imprinted in the pavement area.

Question 03 Is crushed concrete acceptable for the OBG 09?

Response 03 Any materials within optional base group 09 are allowed at the appropriate thickness. Recycled Concrete aggregate and Graded aggregates are indicated in OBG 09.

Question 04 Is the contractor responsible for the testing?

Response 04 Yes, the contractor is responsible for all testing.

Question 05 What permits are required to be supplied by the contractor and what are their cost?

Response 05 City of Tampa Const. Work Start (CSW) Permit – NO COST to Contractor. SWFWMD Exemption is in the bid document – NO COST to Contractor. The City Water Dept. is currently obtaining the Water FL Dept. of Health Permit – NO COST to Contractor. No FDOT Construction Use Permit is required on this LAP project.

Question 06 The brick pattern within the roadway on plans sheet 16, is this stamped asphalt of brick? Under what pay item is this paid for?

Response 06 Pay item 0523 1 Pattern Pavement, Vehicular Areas. Within the roundabout truck apron there is imprinted pavement of the 9“colored concrete. Within the splitter island there is overlay to the pavement using preformed thermoplastic pavement marking with a red brick looking patterned pavement. Use the product approved on the APL, submit shop drawing for City approval.

Question 07 Is 2” of topsoil required under all new sod?

Response 07 Pay Item 0570 1 2 Performance Turf Sod. Yes W-17.01 in the City Specifications requires a minimum of 2” thickness of topsoil.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 7, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 3

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01 Will the use of RAP be allowed in the asphalt mix? The specification states that the use of RAP in the asphalt mix is at the engineer's discretion, however for accurate bidding purposes, please advise if RAP will or will not be allowed in the asphalt mix.

Response 01 The use of RAP will be allowed. Contractor will follow the requirements specified under Off-System LAP Specifications "Big 4" section 334-2.3.

Question 02 On the roadway plan sheets the descriptions are missing for the cross hatched or shaded areas.

Response 02 On sheets 12 – 26, there is a legend provided in the lower right corner indicating the description of the various shaded areas.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 8, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 4

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information.
The question and response are below.

Question 01 Regarding Spec W-523 Stamped Concrete; is this spec to be used for pay item 350-3-7 Plain Cement Concrete Pavement 9" in the roundabout?
There is Brick Pattern Pavement Overlay called out just east of the roundabout; is W-523 to be used for this as well?

Response 01a Yes. Spec. W-523 applies to the Plain Cement Concrete Pavement 9" for stamped/imprinted concrete pavement. Pay item is 523 1.

Response 01b No. Preformed thermoplastic pavement marking with a red brick looking patterned pavement overlay is also Pay Item 0523 1. This is overlay for asphalt, and imprinting for concrete. Use the product approved on the APL, submit shop drawing for City approval.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 8, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 5

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information.
The question and response are below.

Question 01 Bid tab has asphalt resurfacing pay item 337-7-83: FC 12.5C PG76-22; however, typical section #1 & #2 call out SP9.5C. Can you specify which mix we are to price and provide revised plans?

Response 01 FC 12.5 C PG 76-22 is correct. Revision 01 will include an updated plan set.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 8, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 6

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01	Sheet C-10 of the specs, contract item 523-1 Pedestrian Ramp does not coincide with pay item 523-1 Patterned Pavement Vehicular Areas. Can you clarify?
Response 01	Pay item number 0523 1 refers to patterned pavement, vehicular areas. See sheet 30. This is for pavement overlays and impressions at the roundabout splitter island and truck apron. Pay item 0527 2 is for detectable warnings at the curb ramps.
Question 02	Can you provide a pay item for relocating mailboxes; there is only a pay item for F&I?
Response 02	There is no relocation of existing mailboxes, only F& I of new. The call-out on plans to relocate mailbox indicates the location for the new mailbox.
Question 03	Pay item 528-1 is paid for by the SF; bid tabs has this item as being paid by the SY, can you clarify?
Response 03	The 528 1 pay item is for SF. The quantity indicated is correct at 96 SF not SY.
Question 04	Some bid tab quantities do not agree with the summary of pay item quantities in the plans; is there another plan set that we're missing?
Response 04	Yes. Revision 01 will be published providing updated plans
Question 05	Fence pay item 550-10240; do you want the fence per Standard Plans 550-002 or what is called out on plan sheets 19 & 20?
Response 05	Revision 01 will include an updated plan set. Pay item 550 10248 reset existing fence. Use what is called out on plan sheets 19 & 20.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 8, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 7

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01 Can you provide an embankment quantity, cross sections with cut/fill info & add an embankment pay item?

Response 01 Any embankment required is incidental to the proposed stormwater system and generated by the 'Furnish & Install" of the proposed stormwater pipes, inlets, and roadway reconstruction (cross sections sheets 43 – 55).
The legend on roadway plans sheet numbers 13-14 indicates remove and replace existing sod over the proposed pipes. Spot grades are given. Please refer to the Special Profiles on roadway sheet numbers 27-28. The intent is to replace the existing swale with a proposed swale to connect the proposed ditch bottom inlets, structures S-5 thru S-14. Please also refer to the Drainage Structure Sheet numbers 33-37.
A Pay Item Note has been added to roadway sheet number SQ-1.
Revision 01 includes these sheets.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 9, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 8

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01 On the bid form, there are several pay items whose complete Item Descriptions are cut off and cannot be read. Can a revised bid form with the complete item descriptions be provided?

Response 01 Addendum 01 will include your request.

Question 02 Is there a set of Utility Plans that can be provided or are we expected to bid the utility work based on the Utility Adjustment plan sheets in the Roadway Plans? The utility adjustment sheets in the Roadway Plans show the approximate limits of new water mains but do not identify/call out fittings (bends, tees, reducers, etc.) nor do they identify tie-ins, connections, line stops, valves or fire hydrants.

Response 02 Addendum 01 will include your request.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 9, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 9

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01 The Special Events listed on sheet 11 contradict the Special Events listed on sheet 124. Can you clarify?

Response 01 Addendum 01 will include your request.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 9, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 10

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01 Is the existing asphalt curb staying in place unless it conflicts with new construction?

Response 01 Yes.

Question 02 Several driveways (not being replaced) are currently at a higher elevation at the EP. These driveways will remain at a higher elevation at the EP after the milling/paving operation. Can you verify that this is your intent?

Response 02 Yes. It is our intent to match the existing EP elevation and the EP profile. Some driveways that have a slight vertical lip will remain as existing.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 9, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 11

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01 The fencing bid item lists to reset existing on the bid items sheet. The summary of pay items seem to be asking for all new fence. Please advise.

Response 01 See Addendum with revision 01 plan set. The intent is the reset existing fence. Pay Item No. 0550 10248.

Question 02 The pipe handrail is listed as "guiderail" in the bid items but as "pedestrian picket rail" in the summary of bid items. Please clarify.

Response 02 See addendum with revision 01 plan set. The Pay Item Number is 0515 1 2 – Pipe Handrail – Guiderail (aluminum) in the Summary of Pay Items and the Summary of Quantities. Use this number.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 10, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 12

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information. The question and response are below.

Question 01	The brick pattern within the roadway on plans sheet 16, is this stamped asphalt of brick? Under what pay item is this paid for?
Response 01	Pay Item 0523 1 Patterned Pavement, Vehicular Areas. This pay item covers the overlay on the splitter island and the imprint on the truck apron (9" colored concrete). Use the product approved on the APL, submit shop drawing for City approval for the overlay.
Question 02	Is 2" of topsoil required under all new sod?
Response 02	In accordance with City Standards, 2" of topsoil is required.
Question 03	Water Main plans?
Response 03	See addendum No. 1
Question 04	The fencing bid item lists to reset existing on the bid items sheet. The summary of pay items seem to be asking for all new fence. Please advise.
Response 04	Pay Item 0550 10248 is for resetting existing fences. Use this pay Item. See Addendum No. 1
Question 05	The pipe handrail is listed as "guiderail" in the bid items but as "pedestrian picket rail" in the summary of bid items. Please clarify.
Response 05	Use Pay item 0515 1 2 for Pipe Handrail – Guiderail, Aluminum. See Addendum No. 1
Question 06	The fencing bid item lists to reset existing on the bid items sheet. The summary of pay items seem to be asking for all new fence. Please advise
Response 06	See Response 04

Question 07 The pipe handrail is listed as "guiderail" in the bid items but as "pedestrian picket rail" in the summary of bid items. Please clarify.

Response 07 See Response 05

Question 08 Please clarify what to bid under maintenance, technical plans sheet L24 calls for 180 days specification section 112 Trees, Plants, and groundcovers 3.3 Maintenance stated 30 days.

Response 08 See Addendum No. 1. Sheet L21.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

TERRA
TECTONICS
design group, inc.

July 11, 2020

Ms. Nina Mabilleau, E.I.
Project Management Engineer III, Mobility Department
City of Tampa / 306 E. Jackson St., MC290A6E / Tampa, Florida 33602
p: (813) 274-8542 / e: nina.mabilleau@tampagov.net

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 13

Dear Nina,

Terra Tectonics design group, Inc. has reviewed the interested bidder request for information. The question and response are below.

QUESTION 1: Please clarify what to bid under maintenance, technical plans sheet L24 calls for 180 days specification section 112 Trees, Plants, and groundcovers 3.3 Maintenance stated 30 days.

RESPONSE: See Addendum 2. Plan sheets L14-L16 are correct. The warranty period is for 12-months from date of final acceptance.

QUESTION 1: Please clarify what to bid for the landscape maintenance time period. Plan sheets L14 – L16 calls for 12 month. Plan sheet L24 calls for 180 days. Technical specs section W112 Trees, Plants, and groundcovers calls for 30 days.

RESPONSE: See Addendum 2. Plan sheets L14-L16 are correct. The warranty period is for 12-months. L24 refers to Irrigation details, there is no maintenance information on this page.

QUESTION 1: Can you provide details/specs for pay item 1 Connection To TECO Energy Power Meter?

RESPONSE: Connection information is detailed on plan sheet L10 and further information on sheet L21.

QUESTION 2: Reference Sheet L15 General Landscape Notes #5 states that all irrigation is to be a lump sum price; however, there have pay items. Can you clarify?

RESPONSE: Contractor to provide unit price for each Pay item and Lump sum for total of all pay items.

QUESTION 3: Reference Sheet L15 General Landscape Notes #5 states that tapping into water main is to be included in irrigation lump sum price. Can you clarify?

RESPONSE: Contractor to provide unit price for each Pay item including tapping into main and then a Lump sum for total of all pay items.

QUESTION 4: Reference Sheet L15 General Landscape Notes #6 states that we are to provide a lump sum price for truck watering up to final acceptance & during the maintenance period; however, there is not a line item for this on the bid tabs. Can you clarify?

RESPONSE: There will be no truck watering – there will be a permanent irrigation system as shown on plans. Lumps sum for truck watering is not required.

QUESTION 5: Reference Sheet L15 General Landscape Notes #6 states that truck watering during the maintenance period is to be in lieu of installing irrigation; however, there are irrigation pay items. Are the irrigation pay items an alternate? Can you clarify?

RESPONSE: Please provide a cost for the Pay Item of the irrigation system. There will be no truck watering.

QUESTION 6: Reference Sheet L16 General Landscape Notes #29 states that the City takes over watering & maintaining City & FDOT properties at final acceptance; this contradicts the 12 month maintenance & warranty period note on sheet L14, Note #6 on sheet L15 & also contradicts the Watering Note on sheet L21. Can you clarify?

RESPONSE: Contractor will maintain project throughout construction and until end of the 12-month warranty period. City will then assume maintenance responsibility at end of 12-month warranty period. City will begin assumption of water bill at end of 12-month warranty period. Contractor will assign over TECO bill and water meter bill at end of 12-month warranty period.

QUESTION 7: Reference Sheet L16 General Landscape Notes #34 states that the maintenance period for plantings begins at time of installation & ends at final acceptance; this contradicts notes on sheet L14 , note #6 on sheet L15 & Watering Note on sheet L21. Can you clarify?

RESPONSE: Contractor will maintain project throughout construction and until end of the 12-month warranty period. City will then assume maintenance responsibility at end of 12-month warranty period. City will begin assumption of water bill at end of 12-month warranty period. Contractor will assign over TECO bill and water meter bill at end of 12-month warranty period.

QUESTION 8: The Watering note on sheet L21 states we are to tap into a 12” water main; however, plan sheet L10 states the water main is 8”. Can you clarify?

RESPONSE: The plan sheets are correct – the water main is 8”

QUESTION 9: For your information, there are two sheets labeled L21.

RESPONSE: See Addendum 2.

Respectfully,

Terra Tectonics design group, Inc.

Jonathan H. Toner, ASLA, ISA
Fl Reg. Landscape Architect, FL 0001123
ISA-Certified Arborist FL0948a

Ingenuity, Integrity, and Intelligence.

July 15, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 14

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information.
The question and response are below.

Question 01 We are having a hard time finding the electrical requirements in the bid docs. I saw there is a TECO connection service in the bid item, but I just can't locate it in the drawings. Please advise.

Response 01 See Addendum 02. Sheet L10, Station 74 + 38, 47 Ft. Lt. - indicates a TECO Power Pole. Note provides guidance for coordination for controller, meter and conduit.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 16, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 15

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information.
The question and response are below.

Question 01 (44) Red Rocket Crape Myrtle 4" Cal. for this project -
I have been trying to locate Red Rocket Crape Myrtle for this project and no one in our state has the size required. I was speaking with Stardust Farms whose one of the grower in our area, he stated that we will never locate this type of crape as they do not caliper that big. Plan noted that substitution is not allowed unless approved by the owner.

Please provide substitution for bidding purpose.

Response 01 We have inquired about the availability of other Crepe Myrtle trees from the same source – Stardust Farms. The City will accept substitutes such as the following which is currently available:
Muscogee (Lavender) 110 gal fabric root ball 4” caliper standard single trunk 9’ clear trunk
“Deep Purple” 100 gallon 4-5” caliper Crepes - pruned to 16’, 8-9’ clear trunk
Pink-Red color- (Tuskegee) – 110 gallon-fabric, standards 8’-9’ clear trunk

There can be a mixture to types to develop a total of 37 trees.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager

Ingenuity, Integrity, and Intelligence.

July 16, 2020

Ms. Nina Mabilleau, E.I.
City of Tampa – Transportation Division
306 East Jackson Street
Tampa, Florida 33602

RE: 46th Street PoDI LAP Project RFI
City Contract 19-C-00046
City CIP# 1001220
FPN: 437246-1-58-01
RFI 16

Dear Nina,

Ayres Associates, Inc. has reviewed the interested bidder request for information.
The question and response are below.

Question 01 (44) Red Rocket Crape Myrtle 4" Cal. for this project -
I have been trying to locate Red Rocket Crape Myrtle for this project and no one in our state has the size required. I was speaking with Stardust Farms whose one of the grower in our area, he stated that we will never locate this type of crape as they do not caliper that big. Plan noted that substitution is not allowed unless approved by the owner.

Please provide substitution for bidding purpose.

Response 01 We have inquired about the availability of other Crepe Myrtle trees from the same source – Stardust Farms. The City will accept substitutes such as the following which is currently available:
Muscogee (Lavender) 110 gal fabric root ball 4" caliper standard single trunk 9' clear trunk
"Deep Purple" 100 gallon 4-5" caliper Crepes - pruned to 16', 8-9' clear trunk
Pink-Red color- (Tuskegee) – 110 gallon-fabric, standards 8'-9' clear trunk

A mixture of types is acceptable to develop the total needed at 37 trees.

Question 02 The quantity shown on bid form and what is on plan does not match. Are we to bid the quantity on the bid form or the plan?

Response 02 Please bid the plan quantity of 37.

Sincerely,
Ayres

Jeffrey Siewert, P.E.
Project Manager