

COLLIN COUNTY
FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS
Dallas North Tollway to S.H. 289 (Preston Road)
Project No. IFB 2020-303

CHANGE ORDER NO. 5

A. INTENT OF CHANGE ORDER

This change order modifies the Construction Plans and the Construction Contract entered between Collin County and MSSEI for construction of the Frontier Parkway Paving and Drainage Improvements project, dated January 4, 2021 (Collin County Project No. IFB 2020-303).

The intent of this change order is to:

1. Move the location of the All- Storage Driveway approximately 47-feet to the east of its original design location. This additional scope includes all demolition and re-construction required, re-mobilization, extension of appropriate contract quantities, construction cost escalations and appurtenances. (Celina).
2. Provide a new storm sewer headwall and storm sewer for the Dallas North Tollway eastern parkway (all stakeholders).
3. Provide a temporary construction access driveway for the Frontier Crossing development (Celina).
4. Change the bridge railing coating from galvanized to a powder coating matching the Town of Prosper's standard utility pole and traffic rail color (Celina/Prosper).
5. Installation of a stakeholder provided temporary traffic signal controller at the Victory Way/Worthington Way intersection (Celina/Prosper).
6. Provide a coating credit for the BNSF Overpass (all Stakeholders).
7. Provides compensation to the contractor for delays caused by the Atmos Gas Transmission Main crossing approval (all Stakeholders).
8. Provides a credit for low strength concrete breaks on a portion of the project sidewalk (all stakeholders).
9. Adjust the quantity of the MSE Wall Backfill, TxDOT Item 423, Type A to reflect actual installed quantities (all stakeholders)
10. Provides two (2) new left turn lane bays for Slate Commercial Development and North Forest Office, Lot 4 Development (both Celina)

B. DESCRIPTION OF CHANGE

1) All Storage Driveway (Celina)

The City of Celina has requested the All-Storage Driveway original design location be shifted east approximately 47-feet at Sta. 66+54.95 to the revised location at Sta. 67+02.25. This requires modifications to the Frontier Parkway roadway and driveway grades, the already constructed bridge embankment, roadway base, relocates already constructed storm sewer inlet FN-3 (now FN-4 original 8-foot recessed inlet) and adds storm sewer inlet FN-3 (6-foot recessed inlet). Affected construction plan sheets are noted below and attached hereto.

Affects quantities on Pay Items 1-102, 1-111, 1-114, 1-119, 1-122, 1-125, 1-141, 1-143, 1-146, 1-149, & 1-186.

Adds new Pay Items CO-5.1a (MSSEI RFP No. 26), CO-5.1b through CO-5.1i (MSSEI RFP No. 29)

2) Additional Left Turn Bays for Slate Commercial and North Forest, Lot 4 **(Celina)**

At the request of the City of Celina, add an eastbound left turn bay from Sta. 35+80 to Sta. 38+43 (Slate Commercial Tract) and an eastbound left turn bay from Sta. 81+50 to 84+06 (North Forest, Lot 4).

Revised Construction Plan Sheets GC09B, GC18B, P08B, P17B, PM08B, PM017B are attached hereto and replace the original version of the construction plan sheets.

Affects quantities on Pay Items: 1-102, 1-114, 1-122, 1-131, 1-132, 1-133, 1-134, 1-214, 1-197, 1-203, 1-206 and CO-4.1(1-117A)

Adds New Pay Items; CO-5.2a – CO-5.2c (MSSEP RFP No. 32, dated Feb. 28, 2023)

3) New Storm Sewer Line AS-1A - RFI 30 **(All Stakeholders)**

New Storm Sewer Line AS-1A is added to the project to collect and convey storm water run-off from the DNT eastern parkway. Affected construction plan sheets are noted below and included as part of this change order.

Affects quantities on Pay Items 1-140, 1-150

Adds new Pay Items CO-5.3; CO-5.4 and CO-5.11 (MSSEI RFP No. 29)

4) Frontier Crossing Addition Temporary Construction Access **(Celina)**

The City of Celina has requested a new temporary construction access driveway to be provided for the new eastern driveway for the Frontier Crossing Addition. This additional effort will be coordinated in the field by the MSSEI crews. No construction plans sheets nor design will be provided.

Adds new Pay Items CO-5.5 (MSSEI RFP via email 08.10.2022 3:08pm)

5) C221 Traffic Rail Power Coating- **(Celina/Prosper)**

The project stakeholders have requested the C221 Traffic Rail on the BNSF overpass be powder coated to match the standard Town of Prosper standard utility pole and traffic rail color.

Adds new Pay Item CO-5.6 (MSSEI RPF No. 25)

6) Worthington Way/ Victory Way Temporary Traffic Signal **(Celina/Prosper)**

While awaiting delivery of the permanent traffic signal controller, install, make operational and then remove the Stakeholder provided temporary traffic signal controller.

Adds new Pay Item CO-5.7 (MSSEI RFP No. 27)

7) BNSF RR Overpass Coating Credit **(All Stakeholders)**

At the direction of the stakeholders, eliminate coating requirement of BNSF RR Overpass superstructure elements. Lump Sum Credit.

Adds new Pay Item CO-5.8 (MSSEI RFP No. 28)

8) ATMOS Transmission Main Crossing License Agreement **(All Stakeholders)**

Due to delays in securing the necessary Atmos Transmission Main Crossing Agreement, the contractor demobilized his storm sewer pipe crew. This new pay items covers the contractor's cost to re-mobilize.

Adds new Pay Item CO-5.9 (MSSEI RFP No. 28)

9) Low strength sidewalk concrete credit (**All Stakeholders**)

In accordance with the terms of the construction contract, this item provides a credit to the Owner for low strength concrete breaks in the sidewalk, south side of Frontier Parkway from High School Dr. to Victory Way.

Adds new Pay Item CO-5.10 (See attached Exhibit 1 for calculated value).

10) MSE Wall Back fill quantity adjustment (**All Stakeholders**)

During construction of the MSE Wall at the BNSF RR Overpass, it was discovered that the internal corner portion of the MSE Wall Backfill (Pay Item 2-114) was un-quantified. This change order adjust the MSE Wall Backfill quantity to reflect the actual amount installed.

Affects quantity on Pay Item 2-114

C. REVISED CONSTRUCTION PLAN SHEETS

The following associated revised construction plan sheets are revised to show these changes. Each revised sheet is numbered with “**Sheet No. XXA**” and shows “**Change Order No. 5**” in the revision block of the title block.

These revised sheets replace the original construction plan sheets.

Proposed Paving Geometric Control

GC-09B, GC14A – GC15A, GC-18B

Drainage Plan- Profile Sheets

DA15A, DA32A, D56A, D57A

Paving Plan Profile Sheets

P08B, P17B, P13A – P14A and P36A

Pavement Marking Sheets

PM08B, PM17B

D. EFFECT OF CHANGE ON CONTRACT AMOUNT

This change order will have the following effect on the construction contract amount of this project:

Item No.	Description	Previous Quantity (Through CO-4)	Quantity This Change Order No. 5	Revised Quantity	Units	Contract Price	Total Amount of Change
BID SCHEDULE 1 Pay Items							
1-102	Remove Exist. Concrete Pvmnt. or Walk	6,089	158	6,247	S.Y.	\$ 8.00	\$ 1,264.00
1-111	Unclassified Street Excavation	50,094	36	50,130	C.Y.	\$ 10.60	\$ 381.60
1-114	Flexible Base Compacted In Place (8" Type A Grade 2)	85,982	108	86,090	S.Y.	\$ 15.00	\$ 1,620.00
1-119	Construct 8-inch Continuously Reinforced Concrete Pavement	3,240	82	3,322	S.Y.	\$ 48.00	\$ 3,936.00
1-122	Construct 6-inch Monolithic Concrete Curb	35,940	99	36,039	L.F.	\$ 1.00	\$ 99.00
1-125	Construct Undercut Street Header at Existing Concrete Street Pavement	453	71	524	L.F.	\$ 25.00	\$ 1,775.00
1-141	Furnish & Install 18-inch R.C.P. (Class III) by Open Cut w/Class C Embedment CO #4	6,785	(52)	6,733	L.F.	\$ 68.00	\$ (3,536.00)
1-143	Furnish & Install 21-inch R.C.P. (Class III) by Open Cut w/Class C Embedment CO #4	991	112	1,103	L.F.	\$ 80.00	\$ 8,960.00
1-146	Furnish & Install 27-inch R.C.P. (Class III) by Open Cut w/Class C Embedment	927	(17)	910	L.F.	\$ 101.00	\$ (1,717.00)
1-149	Furnish & Install 30-inch R.C.P. (Class III) by Open Cut w/Class C Embedment CO #4	243	2	245	L.F.	\$ 118.00	\$ 236.00
1-186	Design and Implement Trench Safety Systems	15,187	64	15,251	L.F.	\$ 10.00	\$ 640.00
Subtotal, Bid Schedule No. 1, Change Order No. 5 - All Storage Driveway:							\$ 13,658.60
NEW PAY ITEMS, Change Order No. 5 - All Storage Driveway							
CO-5.1a	MSSEI RFP No. 26 Modify Grade of Westbound Lanes Between Sta. 61+95 and 67+78. Additional Flexible Base, Compact and Regrade	0	1	1	L.S.	\$44,248.29	\$44,248.29
CO-5.1b	MSSEI RFP No. 29, Items CO5-2 & CO5-3 Remove and Reset Inlet FN-3 (now Inlet FN-4) from Sta. 67+18 to Sta. 67+59.02 (new sag inlet location)	0	1	1	L.S.	\$ 14,035.29	\$14,035.29
CO-5.1c	MSSEI RFP No. 29 Item CO5-9 18" & 27" RCP Purchase Price and Disposal	0	69	69	L.F.	\$173.69	\$11,984.61
CO-5.1d	MSSEI RFP No. 29. Item CO5-7 Additional Construction Survey Layouts for Allstorage Driveway and Storm Sewer Changes	0	1	1	L.S.	\$12,364.14	\$12,364.14
CO-5.1e	Add 6' Recessed Inlet @ Sta. 66+28 w/18" RCP	0	1	1	L.S.	\$20,092.91	\$20,092.91
CO-5.1f	Add 8' Recessed Inlet @ 67+50 w/27" RCP	0	1	1	L.S.	\$20,534.28	\$20,534.28
CO-5.1g	Pipe Crew Re-Mobilization	0	1	1	Ea.	\$13,139.69	\$13,139.69
CO-5.1h	21" RCP Price Escalation	0	112	112	L.F.	\$17.76	\$1,989.12
CO-5.1i	Irrigation System Repairs Allowance	0	1	1	As Needed	\$10,000.00	\$10,000.00
Subtotal, New Pay Items, Change Order No. 5 - All Storage Driveway:							\$148,388.33
Subtotal- Change Order No. 5 - All Storage Driveway:							\$162,046.93

All Storage Driveway (Celina)

D. EFFECT OF CHANGE ON CONTRACT AMOUNT (Continued):

	Item No.	Description	Previous Quantity (Through CO-4)	Quantity This Change Order No. 5	Revised Quantity	Units	Contract Price	Total Amount of Change
Slate Commercial & North Forest, Lot 4 Left Turn Storage Bays (Celina)	1-102	Remove Exist. Concrete Pvmnt. or Walk	6,089	72	6,161	S.Y.	\$ 8.00	\$ 576.00
	1-114	Flexible Base Compacted In Place (8" Type A Grade 2)	85,982	909	86,891	S.Y.	\$ 15.00	\$ 13,640.00
	1-122	Construct 6-inch Monolithic Concrete Curb	35,940	540	36,480	L.F.	\$ 1.00	\$ 540.00
	1-131	Construct Stamped & Stained Concrete (Median Noses)	3,511	(70)	3,441	S.F.	\$ 27.00	\$ (1,890.00)
	1-132	Furnish & Place Topsoil (4-inches)	180,134	(639)	179,495	S.Y.	\$ 0.50	\$ (319.44)
	1-133	Furnish, Install & Maintain Straw or Hay Mulch (Urban) (Clay)	147,434	(639)	146,795	S.Y.	\$ 0.27	\$ (172.50)
	1-197	Furnish and Install (100 mil) (W) 8" (SLD) Pavement Marker Line (Left-Right Turn) CO #4	5,178	492	5,670	Ea.	\$ 2.00	\$ 984.00
	1-203	Furnish and Install White Thermoplastic Paint Marking (100 mil) (Turn Arrow) CO #4	25	2	27	Ea.	\$ 130.00	\$ 260.00
	1-206	Furnish and Install Small Roadside Sign Assembly (Type 1P)	128	10	138	Ea.	\$ 525.00	\$ 5,250.00
	1-214	Furnish & Install 2-inch PVC Conduit w/Detectable Tape & Pull String (Lighting)	5,623	30	5,653	L.F.	\$ 11.00	\$ 330.00
	CO-4.1	1-117.A -Construct 9-inch Continuously Reinforced Concrete Pavement	2,964	639	3,603	S.Y.	\$ 76.04	\$ 48,581.11
	Subtotal, Bid Schedule No. 1, Change Order No. 5 - Left Turn Bays:							\$ 67,779.17
	New Pay Items, Change Order 5 - Added Left Turn Storage Bays							
	CO-5.2a	Saw Cut and Remove Existing Concrete Curb and Gutter	0	616	616	L.F.	\$ 26.51	\$ 16,332.73
	CO-5.2b	Unclassified Street Excavation for Left Turn Lanes	0	456	456	C.Y.	\$ 13.13	\$ 5,985.68
	CO-5.2c	Longitudinal Butt Joint	0	440	440	L.F.	\$ 14.90	\$ 6,553.88
	Subtotal, New Pay Items, Change Order No. 5 - Left Turn Bays							\$ 28,872.29
	Subtotal- Change Order No. 5 - Left Turn Bays:							\$ 96,651.46

D. EFFECT OF CHANGE ON CONTRACT AMOUNT (Continued):

Item No.	Description	Previous Quantity (Through CO-4)	Quantity This Change Order No. 5	Revised Quantity	Units	Contract Price	Total Amount of Change
BID SCHEDULE 1 Pay Items							
1-140	RFI No. 30 (Stakeholders) Unclassified Channel and Detention Pond Excavation	63,220	20	63,240	C.Y.	\$10.00	\$200.00
1-150	RFI No. 30 (Stakeholders) Furnish & Install 36-inch R.C.P. (Class III) by Open Cut w/Class C Embedment	751	20	771	L.F.	\$142.00	\$2,840.00
2-114	Construct MSE Backfill (TxDOT Item 423, Type A)	6021	2358	8379	C.Y.	\$35.00	\$82,530.00
NEW PAY ITEMS, Change Order No. 5 - Other Items							
CO-5.3	RFI No. 30 (Stakeholders) Connecting 36" RCP to Existing DNT 10' x6' Box Culvert MSSEI RFP No. 29	0	1	1	L.S.	\$ 12,543.51	\$12,543.51
CO-5.4	RFI No. 30 (Stakeholders) Furnish and Install TxDOT Type CH-FW-0 Headwall for 36" RCP MSSEI RFP No. 29	0	1	1	L.S.	\$ 15,679.56	\$15,679.56
CO-5.5	MSSEI Email Proposal 08.10.2022 Temporary Construction Access Drive For Frontier Crossing Development (Celina)	0	1	1	L.S.	\$44,860.00	\$44,860.00
CO-5.6	MSSEI RFP No. 25 (Celina and Prosper) Powder Coat C221 Mod Rail vs. Galvanized	0	1	1	L.S.	\$ 25,287.25	\$25,287.25
CO-5.7	MSSEI RFP No. 27 (Celina/Prosper) Install and Removed Temporary Traffic Signal Cabinet at Victory Way/ Worthington Way	0	1	1	L.S.	\$ 5,605.40	\$5,605.40
CO-5.8	MSSI RFP No. 28 (Stakeholders) Credit for Eliminating Concrete Coating on the BNSF RR Overpass Structure	0	1	1	L.S.	\$ (676.35)	\$ (676.35)
CO-5.9	MSSEI RFP No. 29, Item CO5-12 (Stakeholders) Remobilization of Pipe Crew due to Atmos License Delays	0	1	1	L.S.	\$ 13,139.69	\$13,139.69
CO-5.10	CO-5 Exhibit 1 (Stakeholders) Credit for low concrete strength breaks on Frontier Sidewalk, south side from High School Dr. to Victory Way	0	1	1	L.S.	\$ (2,888.89)	\$ (2,888.89)
CO-5.11	36-inch RCP Price Escalation	0	20	20	L.F.	\$ 42.07	\$ 841.40
Subtotal, Change Order No. 5 - Other Items:							\$199,961.57
GRAND TOTAL, CHANGE ORDER NO. 5:							\$458,659.96

Change Order 5 - Other Items

Original Contract Amount:	\$21,917,967.50
Change Order No. 1	\$84,516.98
Change Order No. 2	\$975,536.93
Change Order No.3	\$633,962.85
Change Order No. 4	\$380,138.11
Change Order No. 5	\$458,659.96
Revised Contract Amount:	\$24,450,782.33

E. EFFECT OF CHANGE ON CONTRACT TIME

The work required under this change order adds 51 calendar days to this project (MSSEI RFP No. 29)

Change Order No. 1	0 Calendar Days
Change Order No. 2	0 Calendar Days
Change Order No. 3	0 Calendar Days
Change Order No. 4	0 Calendar Days
Change Order No. 5	<u>51 Calendar Days</u>
Revised Contract Time	684 Calendar Days

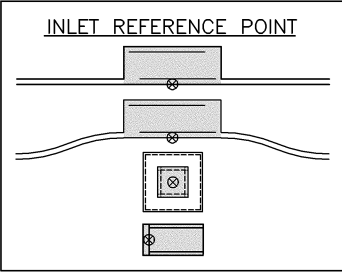
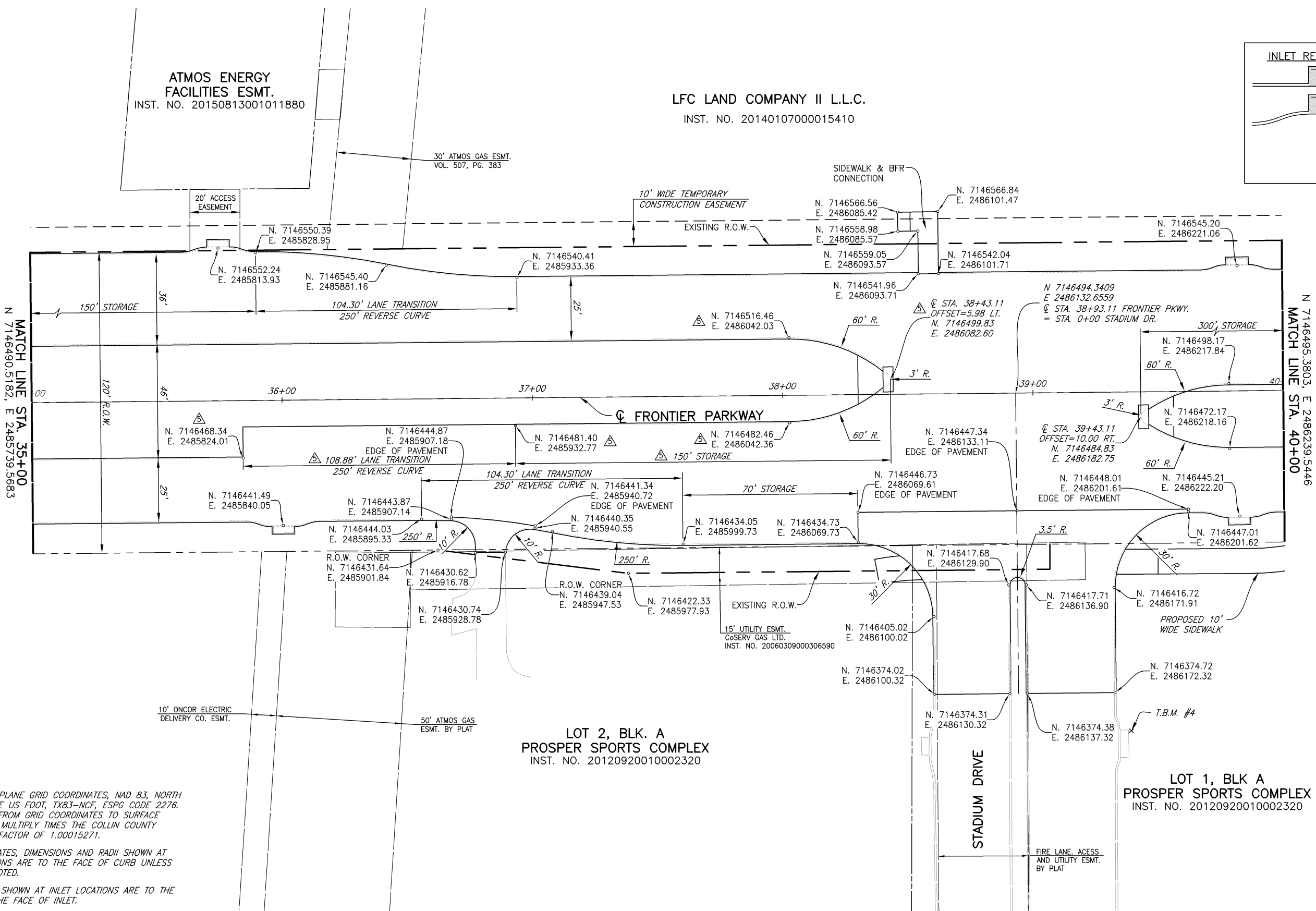
F. AGREEMENT

By the signatures below of duly authorized agents, Collin County, Texas and Mario Sinacola & Sons Excavation, Inc. do hereby agree to append this Change Order No. 5 to the original contract between themselves, dated January 4, 2021.

<u>COLLIN COUNTY, TEXAS</u>	<u>MARIO SINACOLA & SONS EXCAVATION, INC.</u>
Owner	Contractor
By: _____ (signature)	By: _____ (signature)
Name: _____ (print name)	Name: _____ (print name)
Title: _____	Title: _____
Date: _____	Date: _____
Attest: _____	Attest: _____

ATTACHMENTS:

1. Revised Construction Plan Sheets numbered "XXA or B" and marked, "Change Order No. 5" in the revision block of the plan sheet. These sheets replace the current plan sheets.
2. Change Order No. 5 -Exhibit 1- Low Strength Sidewalk Concrete Credit Evaluation



- NOTES:
1. TEXAS STATE PLANE GRID COORDINATES, NAD 83, NORTH CENTRAL ZONE US FOOT, TX83-NCF, ESPG CODE 2276. TO CONVERT FROM GRID COORDINATES TO SURFACE COORDINATES MULTIPLY TIMES THE COLLIN COUNTY ADJUSTMENT FACTOR OF 1.00015271.
 2. ALL COORDINATES, DIMENSIONS AND RADII SHOWN AT CURB LOCATIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
 3. COORDINATES SHOWN AT INLET LOCATIONS ARE TO THE CENTER OF THE FACE OF INLET.

LOT 2, BLK. A
PROSPER SPORTS COMPLEX
INST. NO. 20120920010002320

LOT 1, BLK A
PROSPER SPORTS COMPLEX
INST. NO. 20120920010002320

ADDED LEFT TURN LANE WITH 150' STORAGE - (02/09/2023)

These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks & Carter, L.L.P. If this drawing is converted to an electronic file, if any discrepancy occurs between the electronic file and the Birkhoff, Hendricks & Carter, L.L.P. original document, the original document will govern in all cases.

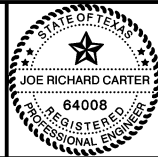
BIRKHOFF, HENDRICKS & CARTER, L.L.P.

PROFESSIONAL ENGINEERS

TBPE Firm No. 526; TBPLS Firm No. 10031800

11910 Greenville Ave., Suite 600

Dallas, Texas 75243 (214) 361-7900



Joe Richard Carter
Spt. 4, 2020

COLLIN COUNTY, TEXAS

FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS

PROPOSED PAVEMENT
GEOMETRIC CONTROL
STA. 35+00 TO STA. 40+00

BHC
PROJECT NO.
2016-137

September 2020

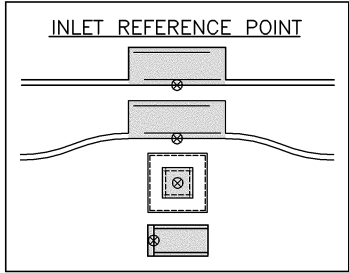
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GC09B

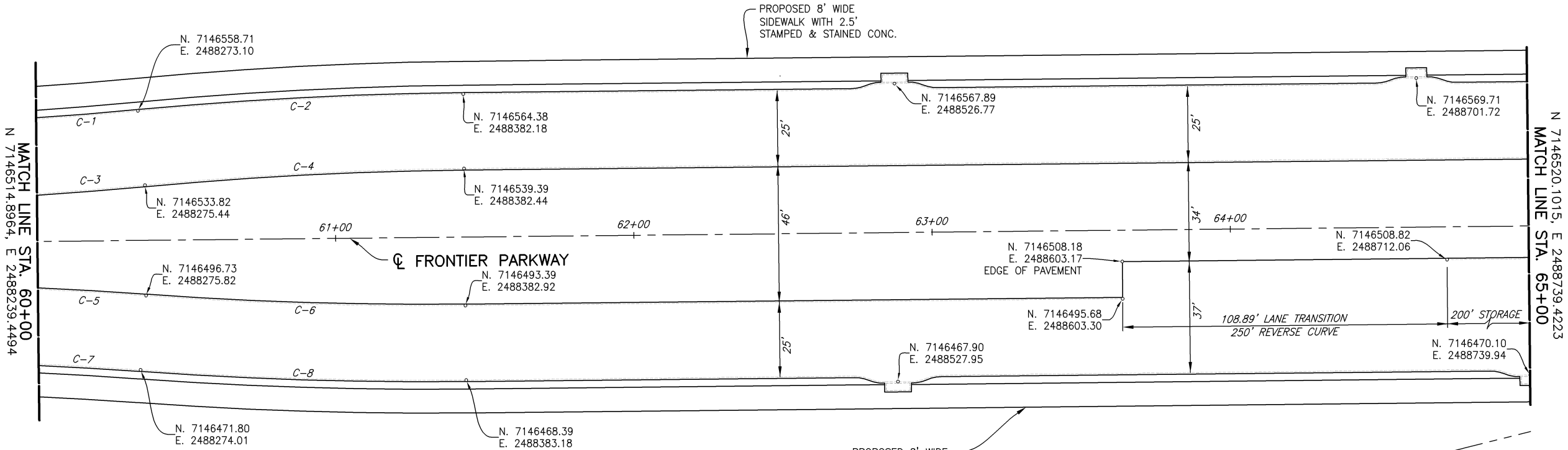
MAHARD EGG FARM II
VOL. 92, PG. 33239

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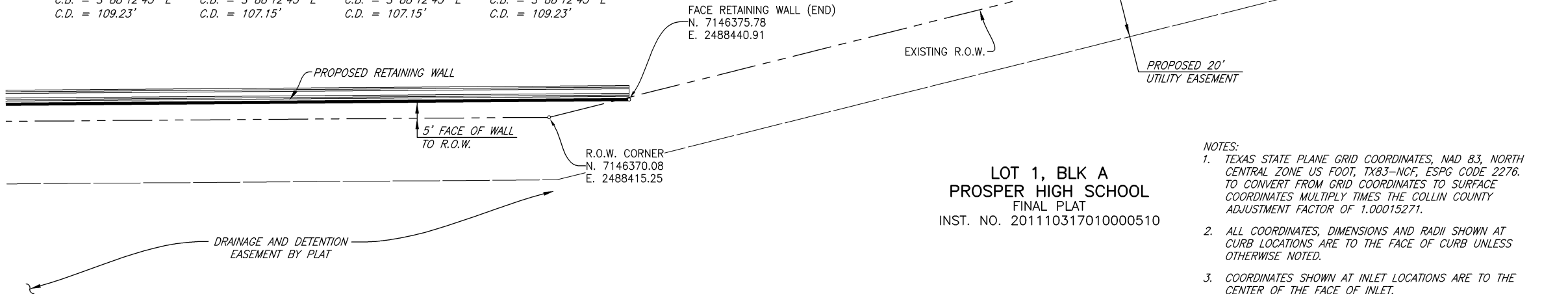
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ACCESS ROAD



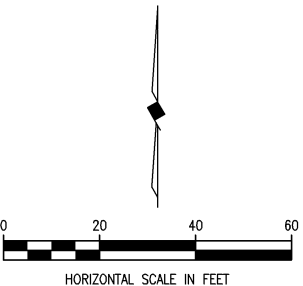
<u>CURVE C-1</u> $\Delta = 04^{\circ}46'04''$ $R = 1288.00'$ $T = 53.62'$ $L = 107.182'$ $C.B. = N\ 87^{\circ}01'11''\ E$ $C.D. = 107.15'$	<u>CURVE C-2</u> $\Delta = 04^{\circ}46'04''$ $R = 1313.00'$ $T = 54.66'$ $L = 109.26'$ $C.B. = N\ 87^{\circ}01'11''\ E$ $C.D. = 109.23'$	<u>CURVE C-3</u> $\Delta = 04^{\circ}46'04''$ $R = 1313.00'$ $T = 54.66'$ $L = 109.26'$ $C.B. = N\ 87^{\circ}01'11''\ E$ $C.D. = 109.23'$	<u>CURVE C-4</u> $\Delta = 04^{\circ}46'04''$ $R = 1288.00'$ $T = 53.62'$ $L = 107.18'$ $C.B. = N\ 87^{\circ}01'11''\ E$ $C.D. = 107.15'$
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<u>CURVE C-5</u> $\Delta = 04^{\circ}46'04''$ $R = 1313.00'$ $T = 54.66'$ $L = 109.26'$ $C.B. = S\ 88^{\circ}12'45''\ E$ $C.D. = 109.23'$	<u>CURVE C-6</u> $\Delta = 04^{\circ}46'04''$ $R = 1288.00'$ $T = 53.62'$ $L = 107.18'$ $C.B. = S\ 88^{\circ}12'45''\ E$ $C.D. = 107.15'$	<u>CURVE C-7</u> $\Delta = 04^{\circ}46'04''$ $R = 1288.00'$ $T = 53.62'$ $L = 107.18'$ $C.B. = S\ 88^{\circ}12'45''\ E$ $C.D. = 107.15'$	<u>CURVE C-8</u> $\Delta = 04^{\circ}46'04''$ $R = 1313.00'$ $T = 54.66'$ $L = 109.26'$ $C.B. = S\ 88^{\circ}12'45''\ E$ $C.D. = 109.23'$
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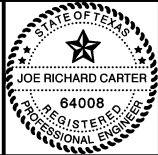
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Change Order No. 5 - 07.26.2022

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BIRKHOFF, HENDRICKS & CARTER, L.L.P.
PROFESSIONAL ENGINEERS
TBPE Firm No. 526; TBPLS Firm No. 10031800
11910 Greenville Ave., Suite 600
Dallas, Texas 75243 (214) 361-7900



Joe Richard Carter
July 26 - 2022

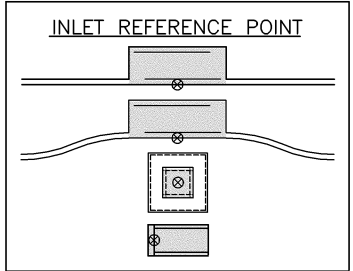
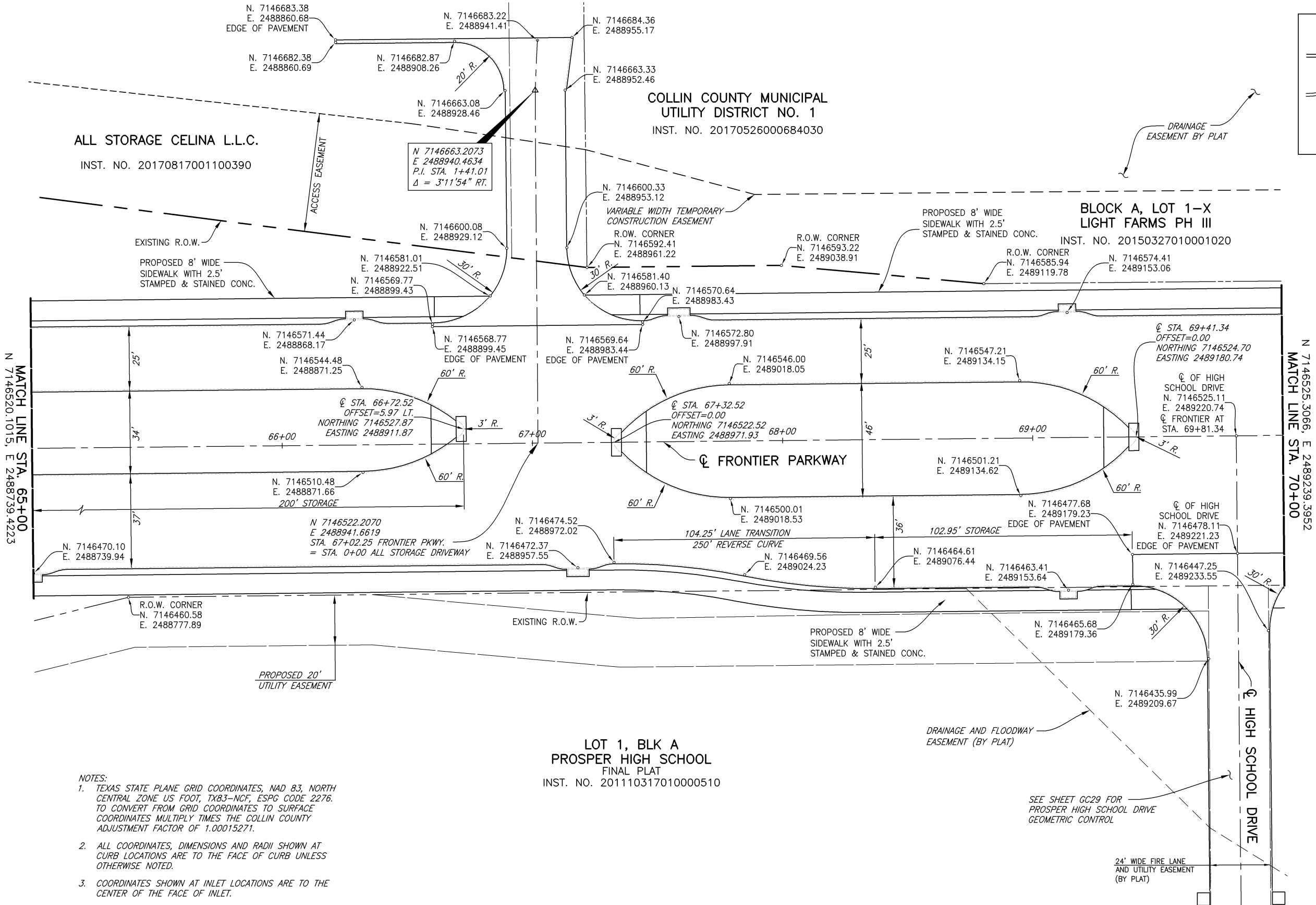
COLLIN COUNTY, TEXAS
FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS
PROPOSED PAVEMENT
GEOMETRIC CONTROL
STA. 60+00 TO STA. 65+00

BHC
PROJECT NO.
2016-137

July 2022

SHEET NO.

GC14A

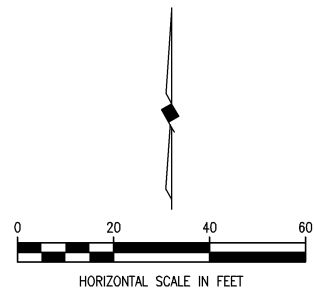


MATCH LINE STA. 65+00
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MATCH LINE STA. 70+00
N 7146525.3066, E 2489239.3952

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LOT 1, BLK A
PROSPER HIGH SCHOOL
FINAL PLAT
INST. NO. 201110317010000510



Change Order No. 5 - 07.26.2022

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PROFESSIONAL ENGINEERS
TBPE Firm No. 526; TBPLS Firm No. 10031800
11910 Greenville Ave., Suite 600
Dallas, Texas 75243 (214) 361-7900

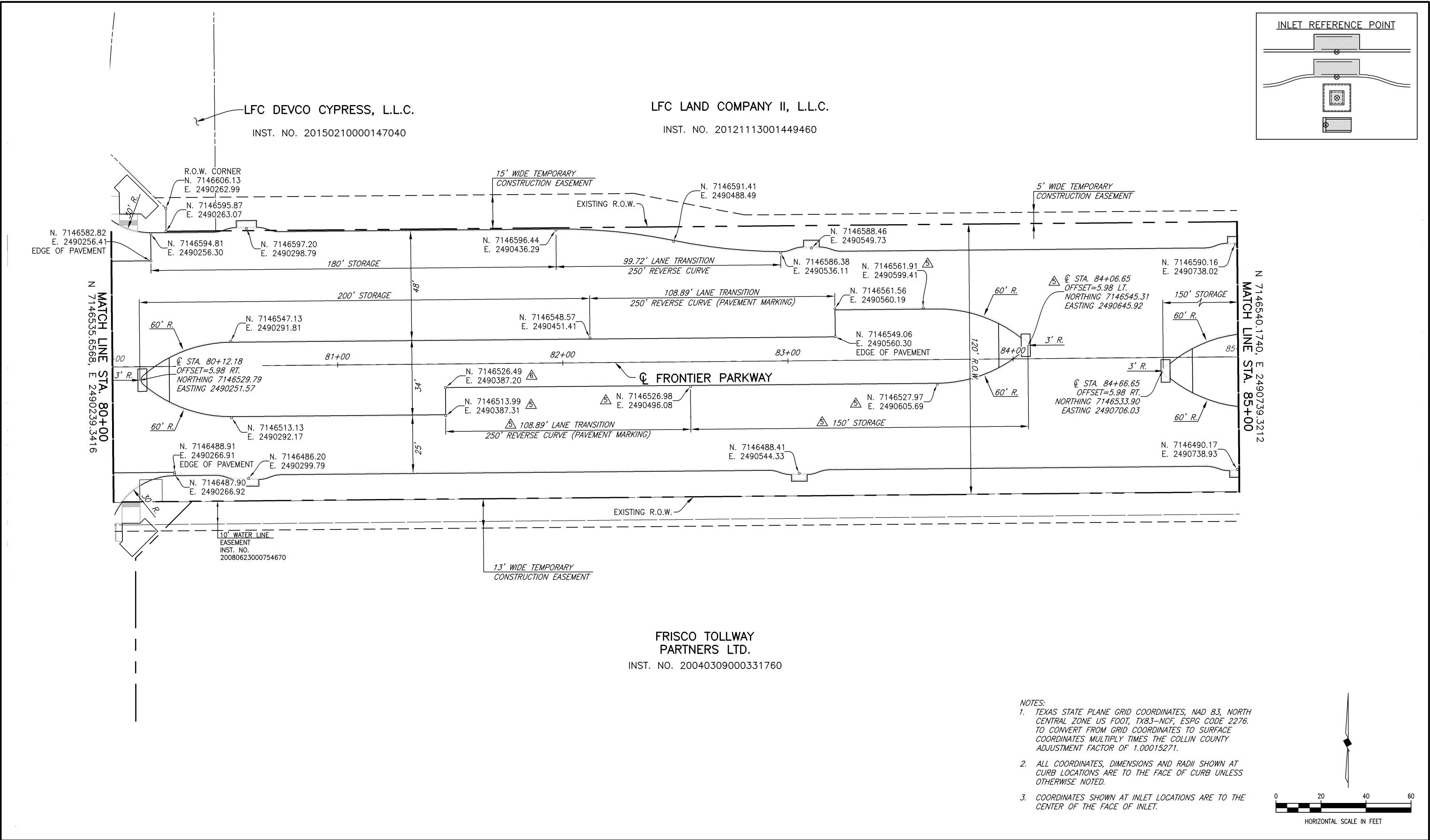


Joe Richard Carter
July 26-2022

COLLIN COUNTY, TEXAS
FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS
PROPOSED PAVEMENT
GEOMETRIC CONTROL
STA. 65+00 TO STA. 70+00

BHC
PROJECT NO.
2016-137
July 2022

SHEET NO.
GC15A



<div>ADDED LEFT TURN LANE WITH 150' STORAGE - (02/09/2023)</div>	<div>These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks & Carter, L.L.P. If this drawing is converted to an electronic file, any discrepancy occurs between the electronic file and the Birkhoff, Hendricks & Carter, L.L.P. original document, the original document will govern in all cases.</div>	<div>BIRKHOFF, HENDRICKS & CARTER, L.L.P.</div> <div>PROFESSIONAL ENGINEERS</div> <div>TBPE Firm No. 526; TBPLS Firm No. 10031800</div> <div>11910 Greenville Ave., Suite 600</div> <div>Dallas, Texas 75243 (214) 361-7900</div>	<div>STATE OF TEXAS</div> <div>REGISTERED PROFESSIONAL ENGINEER</div> <div>64008</div> <div>JOE RICHARD CARTER</div>	<div>Joe Richard Carter</div> <div>Sep. 4, 2020</div>	<div>COLLIN COUNTY, TEXAS</div> <div>FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS</div> <div>PROPOSED PAVEMENT</div> <div>GEOMETRIC CONTROL</div> <div>STA. 80+00 TO STA. 85+00</div>	<div>BHC</div> <div>PROJECT NO.</div> <div>2016-137</div> <div>September 2020</div>	<div>SHEET NO.</div> <div>GC18B</div>
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TBM #6
TOP NUT OF FIRE HYDRANT OPERATING NUT ON THE
WEST SIDE OF HIGH SCHOOL DRIVE, APPROXIMATELY
324 FEET SOUTH OF PROPOSED FRONTIER PARKWAY
CENTERLINE STA. 69+77.43.
N. 7146200.92
E. 2489220.20
ELEV. 664.51

PEDESTRIAN FENCE
STA. 60+00 TO STA. 65+00

PROPOSED 8' SIDEWALK

Q STA. 62+87.85
8' RECESSED INLET

Q STA. 64+62.82
6' RECESSED INLET



NOTES:

1. MATCH LINE COORDINATE AT CENTER LINE OF FRONTIER PARKWAY.
2. ALL CONNECTIONS TO EXISTING OR FUTURE PAVEMENT SHALL INCLUDE CONCRETE STREET HEADER.
3. REFER TO GEOMETRIC CONTROL SHEETS FOR COORDINATES AND ADDITIONAL LAYOUT DATA.
4. ALL FRANCHISE UTILITY RELOCATIONS SHOWN ON THESE PLANS ARE BASED ON INFORMATION PROVIDED BY FRANCHISE UTILITIES.

LEGEND

- PROPOSED 9" PAVEMENT
- PROPOSED 8" PAVEMENT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED BFR
- PROPOSED MEDIAN NOSE

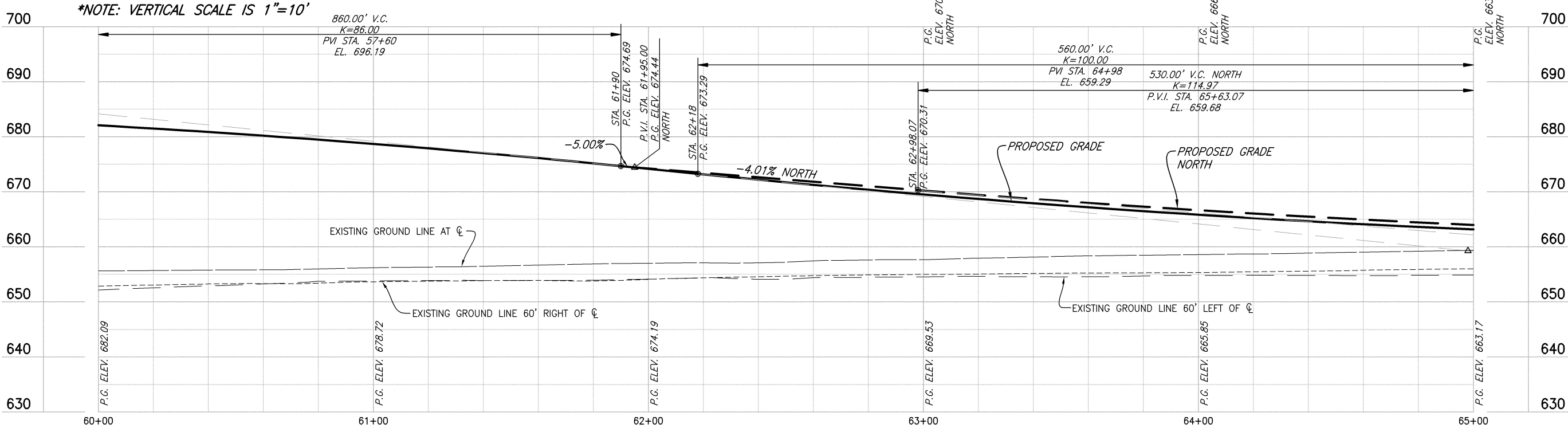
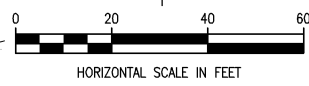
MATCH LINE STA. 60+00
N 7146514.8964, E 2488239.4494

NOTE:
PAVEMENT WIDTH TRANSITION
FROM Q STA. 59+27.05
TO Q STA. 61+43.24

STAMPED AND
STAINED CONCRETE

REFER TO SHEET RW03 FOR
RETAINING WALL PLAN AND PROFILE

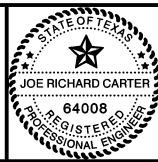
NOTE:
PROPOSED GRADE (P.G.) IS TOP OF CURB
ELEVATION LOCATED 48' FROM CENTERLINE- ADJUST
BASED ON 2% CROSS SLOPE FOR OTHER LOCATIONS.



Change Order No. 5 - 07.26.2022

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Joe Richard Carter
July 26 - 2022

COLLIN COUNTY, TEXAS
FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS
PAVING PLAN AND PROFILE
STA. 60+00 TO STA. 65+00

BHC
PROJECT NO.
2016-137

SHEET NO.

P13A

July 2022

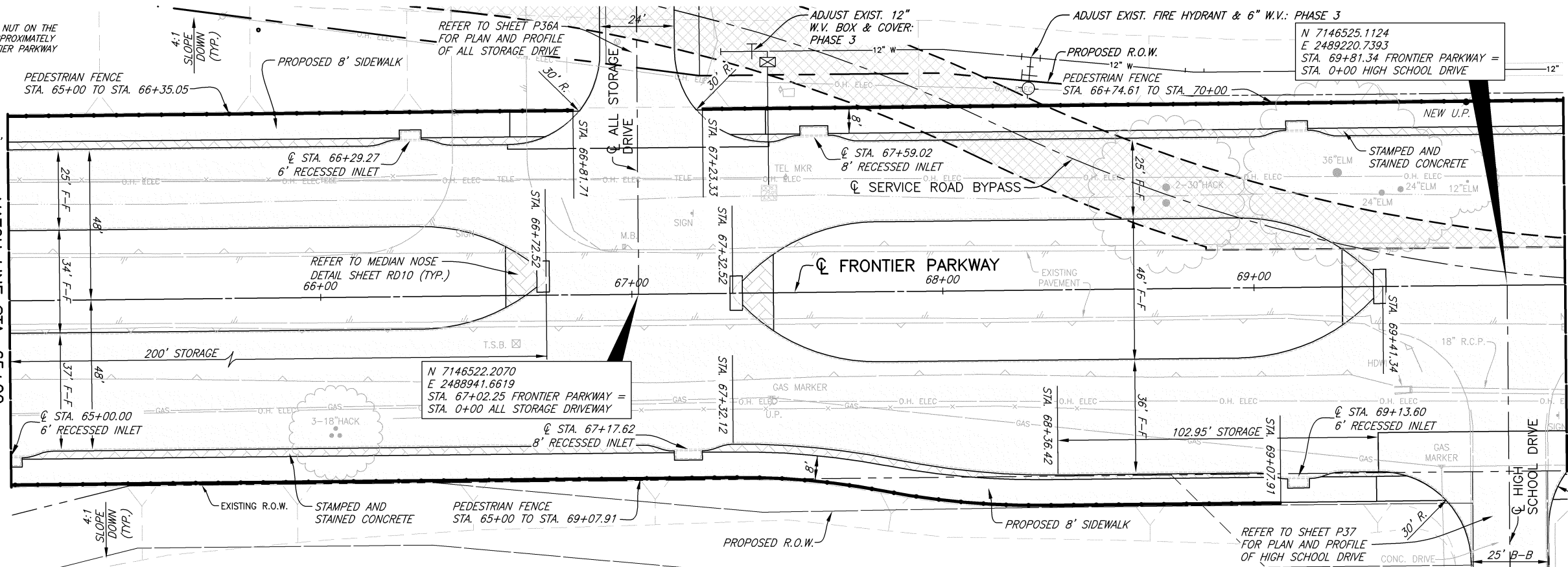
TBM #6
TOP NUT OF FIRE HYDRANT OPERATING NUT ON THE
WEST SIDE OF HIGH SCHOOL DRIVE, APPROXIMATELY
324 FEET SOUTH OF PROPOSED FRONTIER PARKWAY
CENTERLINE STA. 69+77.43.
N. 7146200.92
E. 2489220.20
ELEV. 664.51

NOTE:
PROPOSED GRADE (P.G.) IS TOP
OF CURB ELEVATION LOCATED 48'
FROM CENTERLINE- ADJUST
BASED ON 2% CROSS SLOPE
FOR OTHER LOCATIONS.

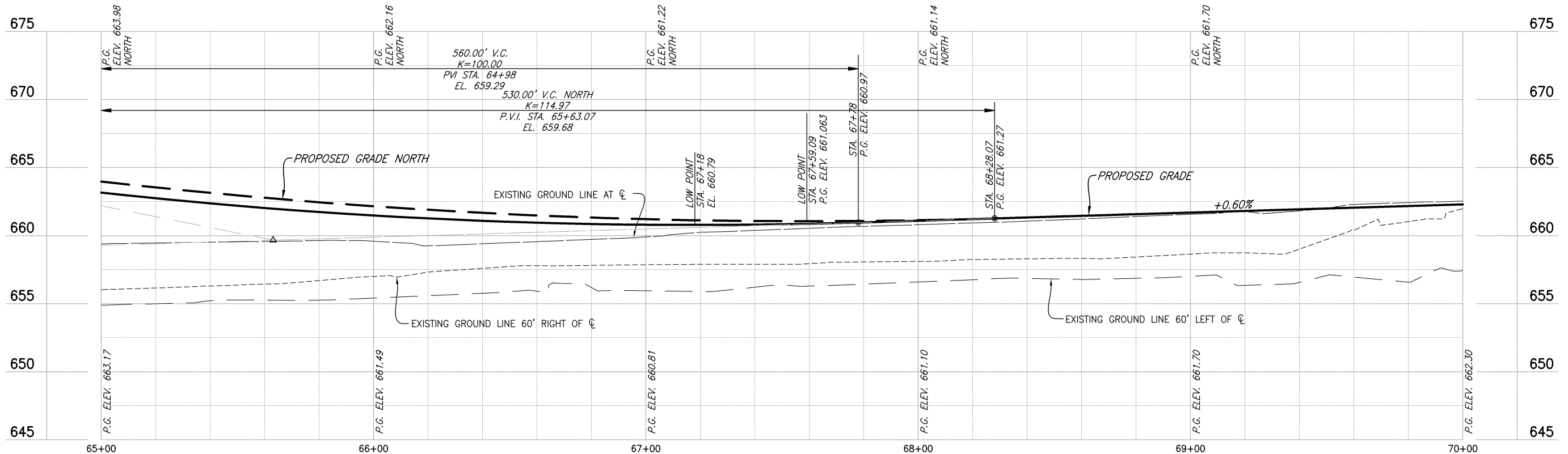
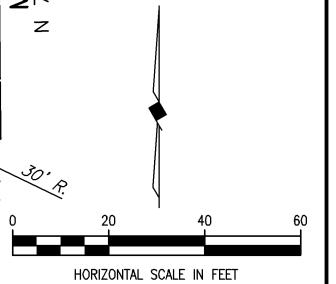
LEGEND

- PROPOSED
9" PAVEMENT
- PROPOSED
8" PAVEMENT
- PROPOSED
ASPHALT PAVEMENT
- PROPOSED BFR
- PROPOSED
MEDIAN NOSE

MATCH LINE STA. 65+00
N 7146520.1015, E 2488739.4223



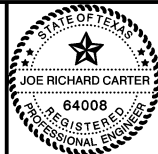
- NOTES:
- MATCH LINE COORDINATE AT CENTER LINE OF FRONTIER PARKWAY.
 - ALL CONNECTIONS TO EXISTING OR FUTURE PAVEMENT SHALL INCLUDE CONCRETE STREET HEADER.
 - REFER TO GEOMETRIC CONTROL SHEETS FOR COORDINATES AND ADDITIONAL LAYOUT DATA.
 - ALL FRANCHISE UTILITY RELOCATIONS SHOWN ON THESE PLANS ARE BASED ON INFORMATION PROVIDED BY FRANCHISE UTILITIES.



Change Order No. 5 - 07.26.2022

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Joe Richard Carter
July 26 - 2022

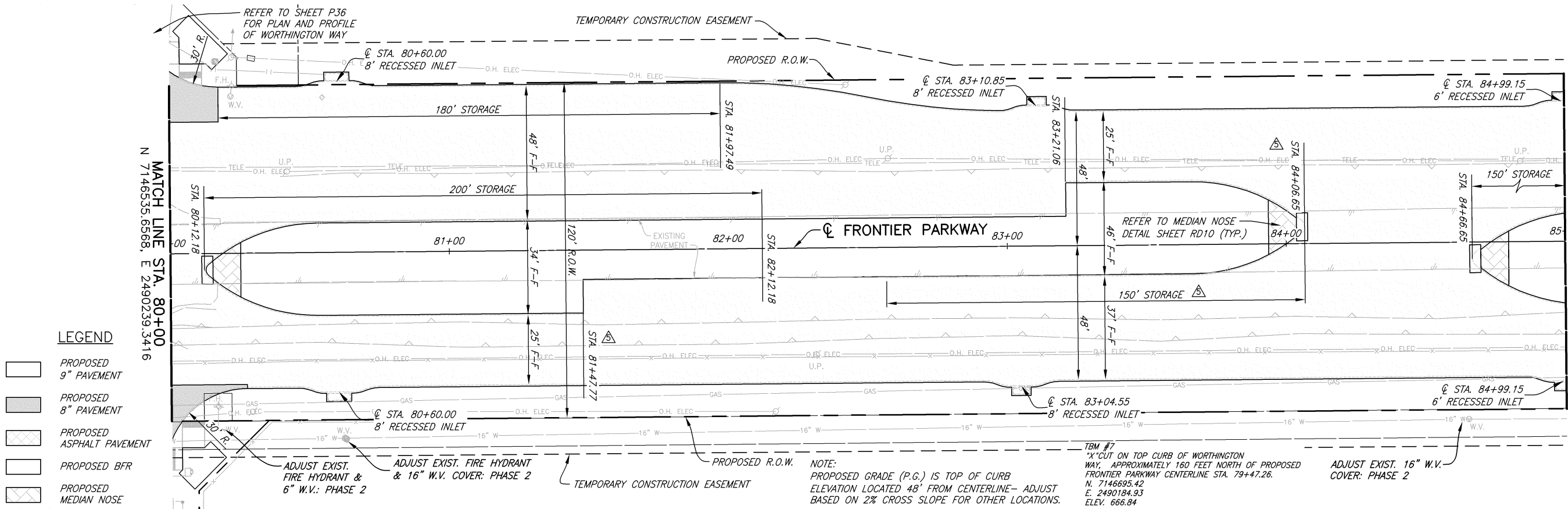
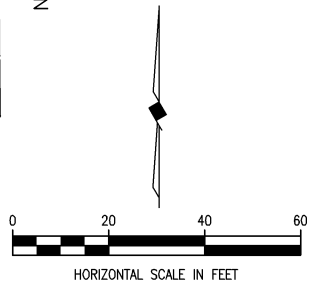
COLLIN COUNTY, TEXAS
FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS
PAVING PLAN AND PROFILE
STA. 65+00 TO STA. 70+00

BHC
PROJECT NO.
2016-137
July 2022

SHEET NO.
P14A

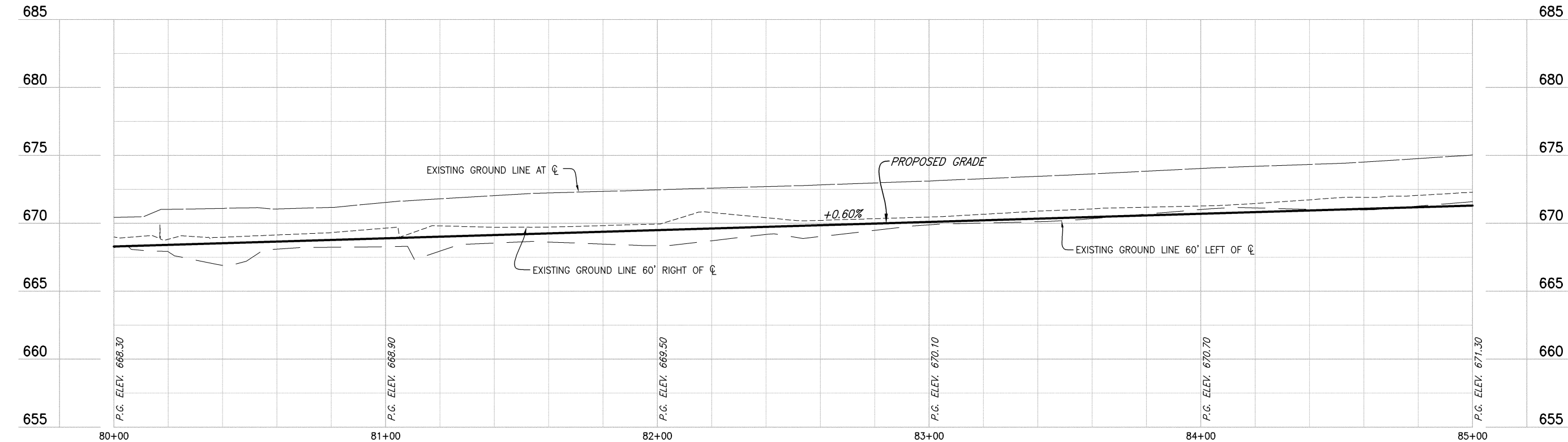


- NOTES:
1. MATCH LINE COORDINATE AT CENTER LINE OF FRONTIER PARKWAY.
 2. ALL CONNECTIONS TO EXISTING OR FUTURE PAVEMENT SHALL INCLUDE CONCRETE STREET HEADER.
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LEGEND

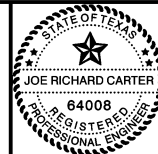
- PROPOSED 9" PAVEMENT
- PROPOSED 8" PAVEMENT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED BFR
- PROPOSED MEDIAN NOSE



CHANGE ORDER NO. 5 - SLATE COMMERCIAL LEFT TURN LANE

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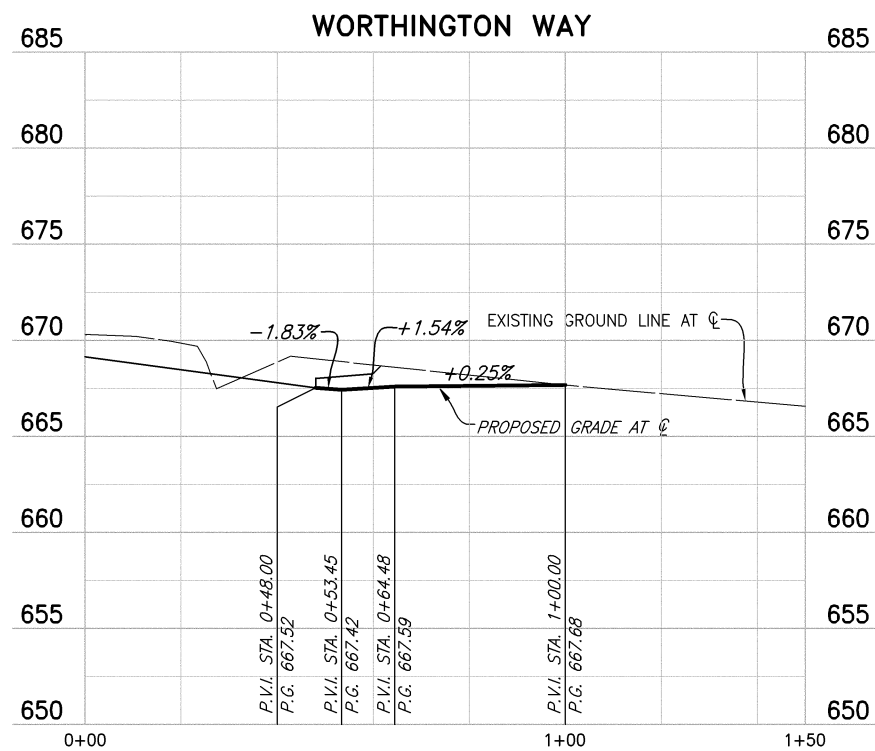
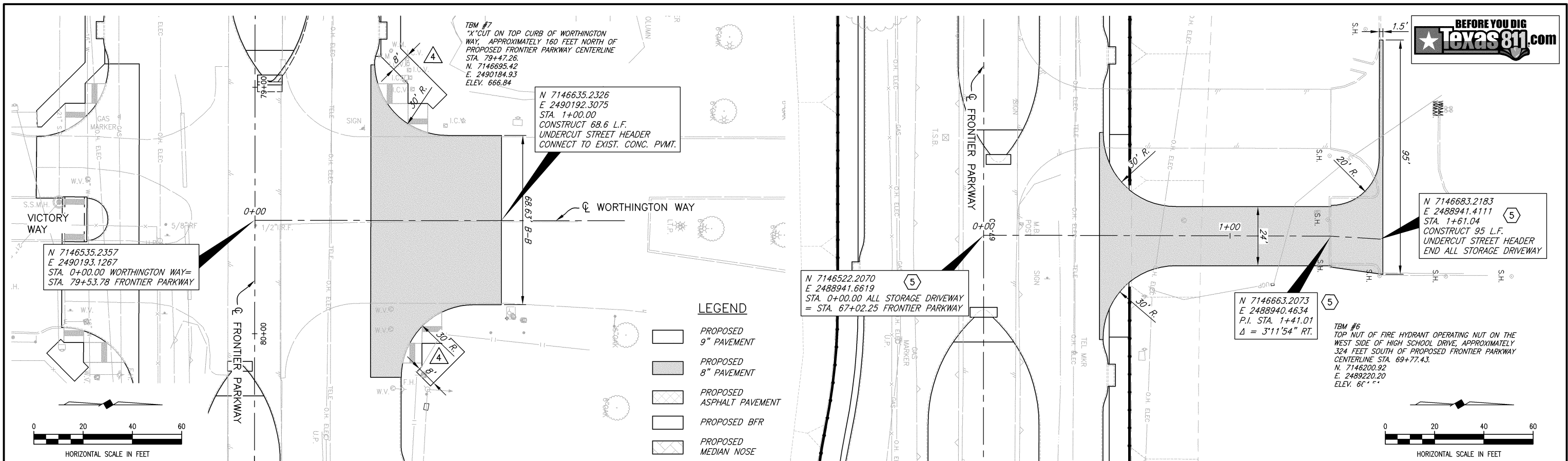


Joe Richard Carter
Sgt. 4, 2020

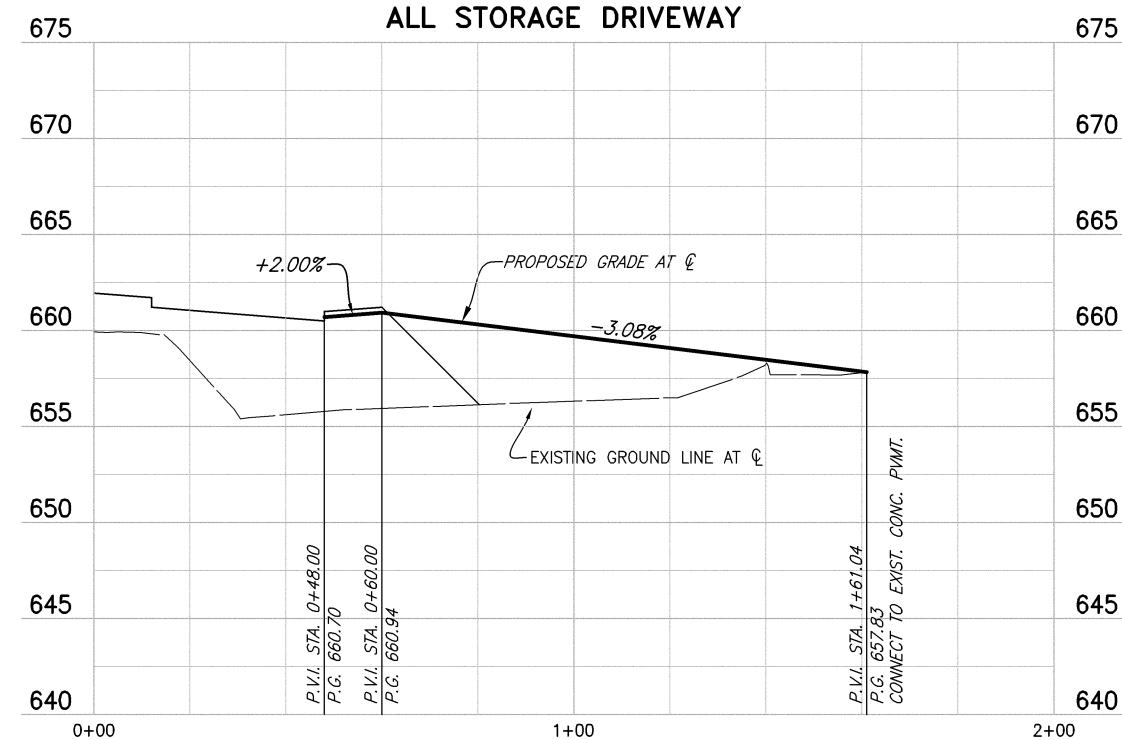
COLLIN COUNTY, TEXAS
FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS
PAVING PLAN AND PROFILE
STA. 80+00 TO STA. 85+00

BHC
PROJECT NO.
2016-137
September 2020

SHEET NO.
P17B



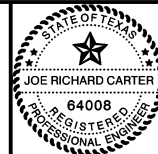
- NOTES:**
- MATCH LINE COORDINATE AT CENTER LINE OF FRONTIER PARKWAY.
 - ALL CONNECTIONS TO EXISTING OR FUTURE PAVEMENT SHALL INCLUDE CONCRETE STREET HEADER.
 - REFER TO GEOMETRIC CONTROL SHEETS FOR COORDINATES AND ADDITIONAL LAYOUT DATA.
 - ALL FRANCHISE UTILITY RELOCATIONS SHOWN ON THESE PLANS ARE BASED ON INFORMATION PROVIDED BY FRANCHISE UTILITIES.



- 4** CHANGE ORDER NO. 4 - WORTHINGTON/VICTORY WAY (04/29/2022)
- 5** CHANGE ORDER NO. 5 - ALL STORAGE DRIVEWAY AND STORM SEWER LINE F-1 (07/26/2022)

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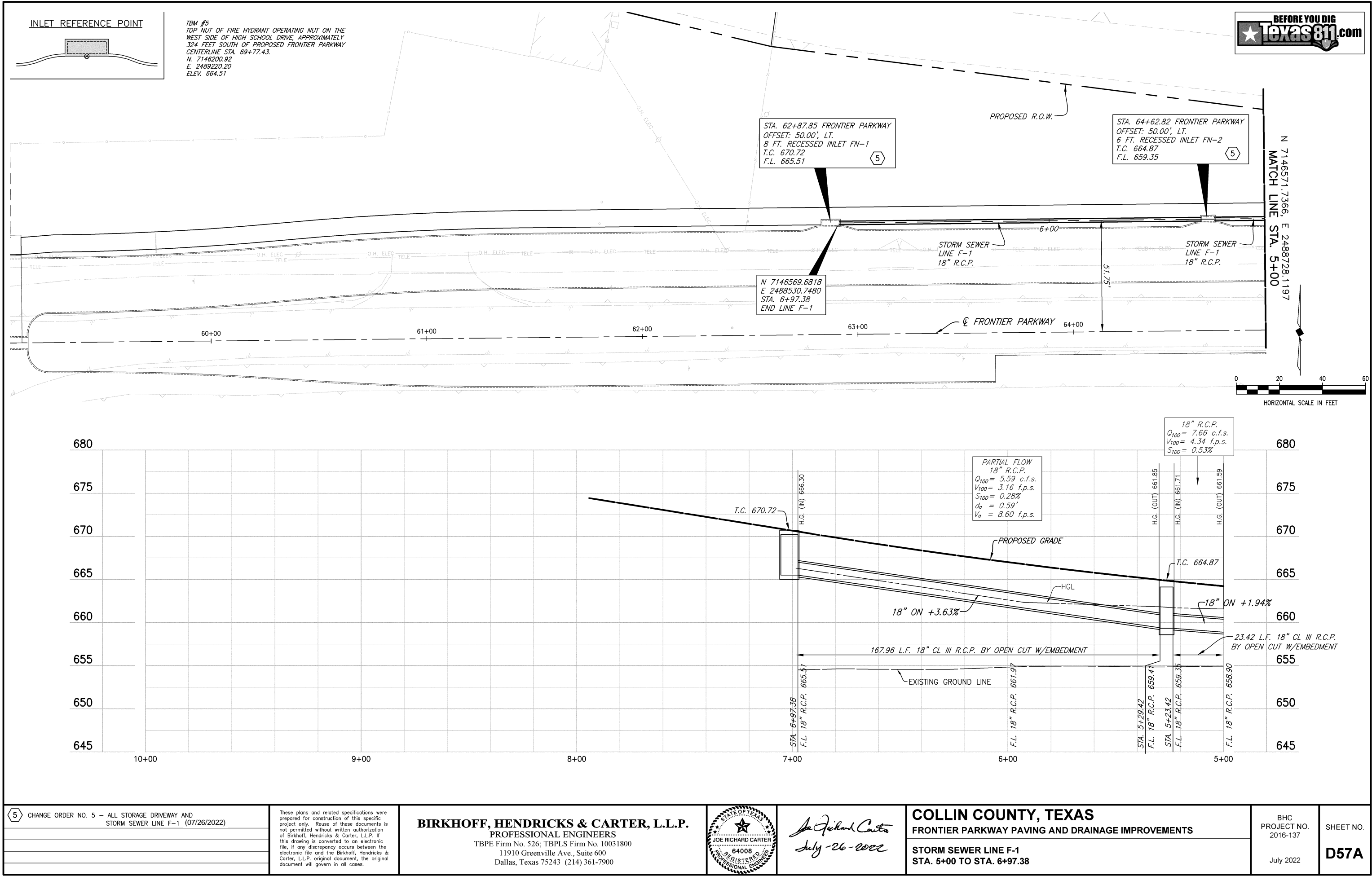


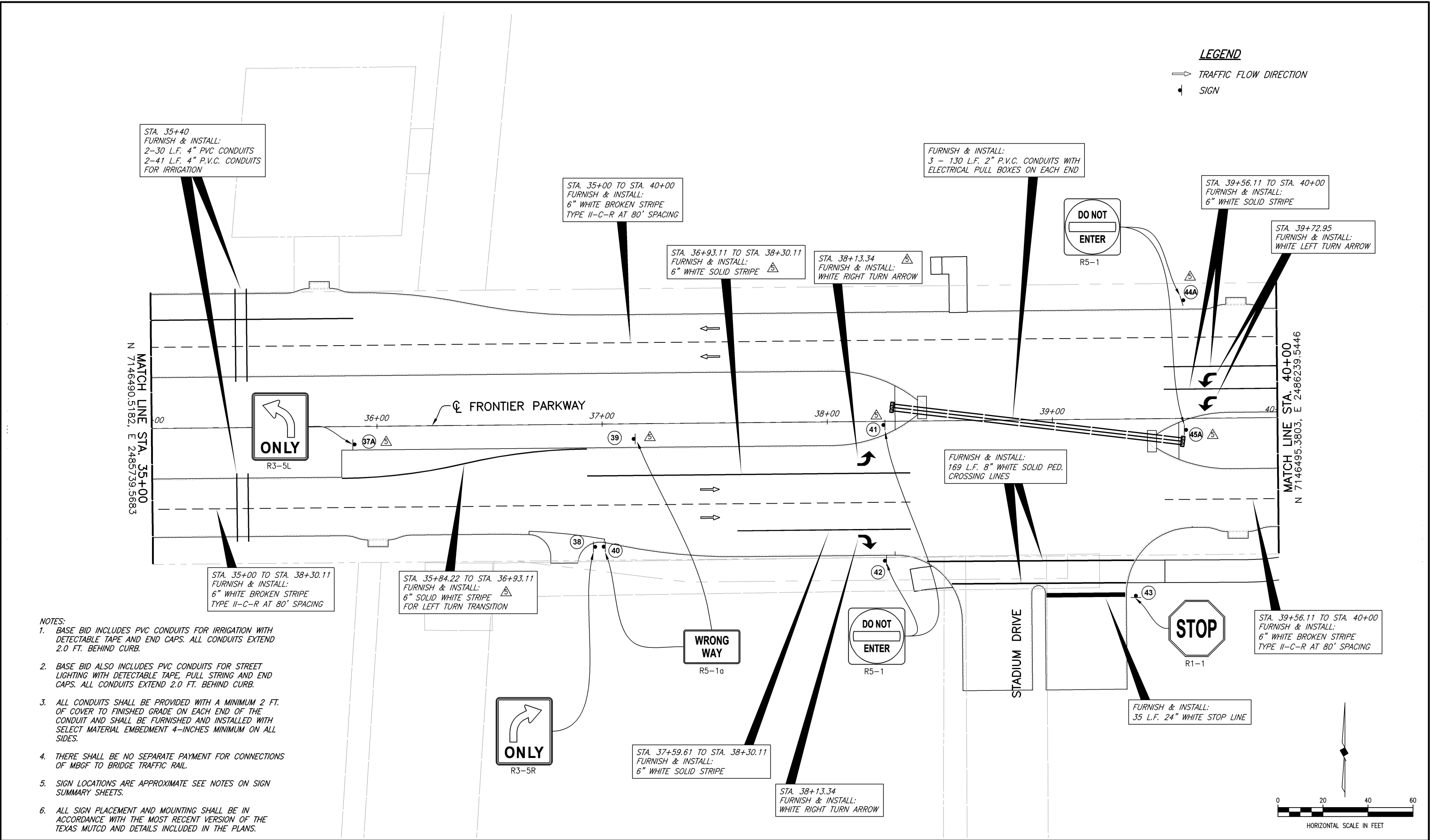
Joe Richard Carter
July 26 - 2022

COLLIN COUNTY, TEXAS
FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS
PAVING PLAN AND PROFILE
WORTHINGTON WAY - STA. 0+00 TO STA. 1+00
ALL STORAGE DRIVEWAY - STA. 0+00 TO STA. 1+61.04

BHC
PROJECT NO.
2016-137
July 2022

SHEET NO.
P36A





LEGEND

→ TRAFFIC FLOW DIRECTION

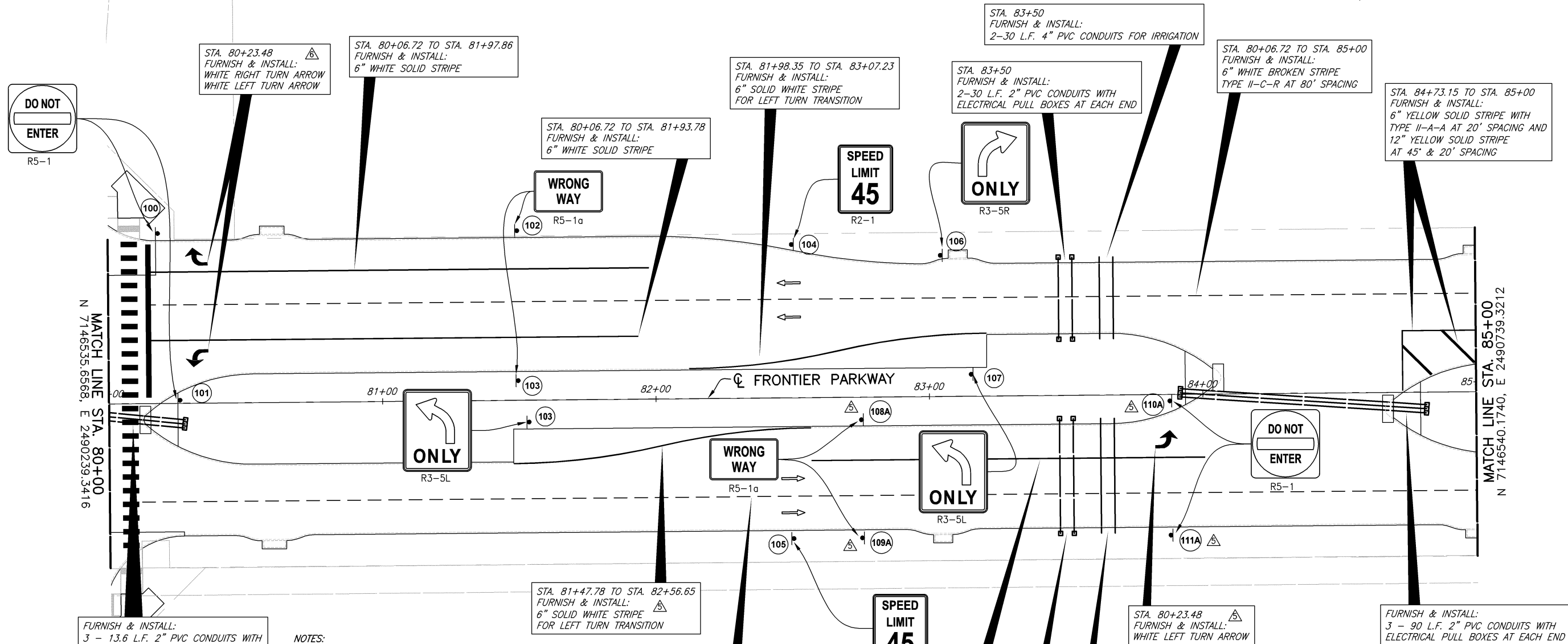
⬮ SIGN

- NOTES:
1. BASE BID INCLUDES PVC CONDUITS FOR IRRIGATION WITH DETECTABLE TAPE AND END CAPS. ALL CONDUITS EXTEND 2.0 FT. BEHIND CURB.
 2. BASE BID ALSO INCLUDES PVC CONDUITS FOR STREET LIGHTING WITH DETECTABLE TAPE, PULL STRING AND END CAPS. ALL CONDUITS EXTEND 2.0 FT. BEHIND CURB.
 3. ALL CONDUITS SHALL BE PROVIDED WITH A MINIMUM 2 FT. OF COVER TO FINISHED GRADE ON EACH END OF THE CONDUIT AND SHALL BE FURNISHED AND INSTALLED WITH SELECT MATERIAL EMBEDMENT 4-INCHES MINIMUM ON ALL SIDES.
 4. THERE SHALL BE NO SEPARATE PAYMENT FOR CONNECTIONS OF MBGF TO BRIDGE TRAFFIC RAIL.
 5. SIGN LOCATIONS ARE APPROXIMATE SEE NOTES ON SIGN SUMMARY SHEETS.
 6. ALL SIGN PLACEMENT AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE TEXAS MUTCD AND DETAILS INCLUDED IN THE PLANS.

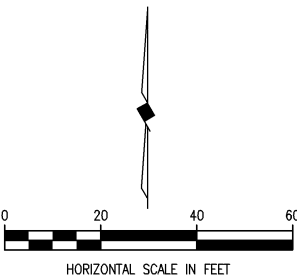
<div>ADDED LEFT TURN LANE WITH 150' STORAGE - (02/09/2023)</div>	<div>These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks & Carter, L.L.P. If this drawing is converted to an electronic file, if any discrepancy occurs between the electronic file and the Birkhoff, Hendricks & Carter, L.L.P. original document, the original document will govern in all cases.</div>	<div>BIRKHOFF, HENDRICKS & CARTER, L.L.P. PROFESSIONAL ENGINEERS TBPE Firm No. 526; TBPLS Firm No. 10031800 11910 Greenville Ave., Suite 600 Dallas, Texas 75243 (214) 361-7900</div>	<div></div>	<div><i>Joe Richard Carter</i> Sept. 4, 2020</div>	<div>COLLIN COUNTY, TEXAS FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS</div>		<div>BHC PROJECT NO. 2016-137 September 2020</div>	<div>SHEET NO. PM08B</div>
					<div>PERMANENT SIGNING, MARKINGS, BARRIERS & CONDUITS STA. 35+00 TO STA. 40+00</div>			


LEGEND

TRAFFIC FLOW DIRECTION
SIGN



- NOTES:
1. BASE BID INCLUDES PVC CONDUITS FOR IRRIGATION WITH DETECTABLE TAPE AND END CAPS. ALL CONDUITS EXTEND 2.0 FT. BEHIND CURB.
 2. BASE BID ALSO INCLUDES PVC CONDUITS FOR STREET LIGHTING WITH DETECTABLE TAPE, PULL STRING AND END CAPS. ALL CONDUITS EXTEND 2.0 FT. BEHIND CURB.
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 6. ALL SIGN PLACEMENT AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE TEXAS MUTCD AND DETAILS INCLUDED IN THE PLANS.



<div>ADDED LEFT TURN LANE WITH 150' STORAGE - (02/09/2023)</div> <div>These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks & Carter, L.L.P. If this drawing is converted to an electronic file, if any discrepancy occurs between the electronic file and the Birkhoff, Hendricks & Carter, L.L.P. original document, the original document will govern in all cases.</div>	<div>BIRKHOFF, HENDRICKS & CARTER, L.L.P.</div> <div>PROFESSIONAL ENGINEERS</div> <div>TBPE Firm No. 526; TBPLS Firm No. 10031800</div> <div>11910 Greenville Ave., Suite 600</div> <div>Dallas, Texas 75243 (214) 361-7900</div>	<div></div> <div>Joe Richard Carter</div> <div>Sep. 4, 2020</div>	<div>COLLIN COUNTY, TEXAS</div> <div>FRONTIER PARKWAY PAVING AND DRAINAGE IMPROVEMENTS</div> <div>PERMANENT SIGNING, MARKINGS, BARRIERS & CONDUITS</div> <div>STA. 80+00 TO STA. 85+00</div>	<div>BHC</div> <div>PROJECT NO.</div> <div>2016-137</div> <div>September 2020</div>	<div>SHEET NO.</div> <div>PM17B</div>
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Collin County, Texas

CHANGE ORDER NO. 5 - EXHIBIT 1


Frontier Parkway Improvements

Low Strength Sidewalk Concrete Contract Evaluation

Core ID	Test Strength	Specified Strength	Percent Specified	Difficiency	Begin Station	End Station	Difficient Length	Width	Difficient Area	Unit Price	Percent Payment	Average	Deduct
	(psi)	(psi)	%	%				(ft)	(S.Y.)		%	%	
1	2,390	3,000	79.7%	20.3%	150	300	150	8	133.3	\$50.00	60	60	-\$2,666.67
2	2,910	3,000	97.0%	3.0%	300	400	100	8	88.9	\$50.00	95		
3	3,490	3,000	116.3%	-16.3%	300	400	100	8	88.9	\$50.00	100	97.5	-\$111.11
4	2,980	3,000	99.3%	0.7%	400	500	100	8	88.9	\$50.00	95		
5	3,190	3,000	106.3%	-6.3%	400	500	100	8	88.9	\$50.00	100	97.5	-\$111.11
6	3,390	3,000	113.0%	-13.0%	500	600	100	8	88.9	\$50.00	100		
7	3,720	3,000	124.0%	-24.0%	500	600	100	8	88.9	\$50.00	100	100	\$0.00
8	4,320	3,000	144.0%	-44.0%	600	700	100	8	88.9	\$50.00	100		
9	3,950	3,000	131.7%	-31.7%	600	700	100	8	88.9	\$50.00	100	100	\$0.00
10	4,400	3,000	146.7%	-46.7%	700	800	100	8	88.9	\$50.00	100		
11	5,230	3,000	174.3%	-74.3%	700	800	100	8	88.9	\$50.00	100	100	\$0.00

Average 3,633.6 3,000 121.1%

TOTAL DEDUCT = -\$2,888.89

 - Greater than 15% Difficient