

AGREEMENT FOR USE OF FIBER OPTIC CABLE AND RELATED INFRASTRUCTURE

This agreement (the "Agreement") is made between the Texas Department of Transportation, an agency of the State of Texas ("TxDOT"), and the North Texas Tollway Authority, a political subdivision of the State of Texas (the "NTTA") as follows:

WHEREAS, the Interlocal Cooperation Act, Chapter 791 of the Texas Government Code, as amended, authorizes local governmental entities to contract with each other to perform governmental functions and services under the terms thereof; and

WHEREAS, TxDOT and the NTTA are political subdivisions of the State of Texas and are engaged in the provision of governmental services for the benefit of their citizens, and

WHEREAS, TxDOT has insufficient fiber network connectivity along Interstate Highway 35E due to construction of the Interstate Highway 635 Managed Lanes Project; and

WHEREAS, TxDOT may have insufficient fiber network connectivity along future projects due to construction activities and may need spare capacity of unused NTTA fiber optic cable; and

WHEREAS, the NTTA desires to provide two (2) unused strands of fiber optic cable ("Dark Fiber") and related infrastructure along the President George Bush Turnpike tollway project to TxDOT to improve its fiber network connectivity; and

WHEREAS, TxDOT and the NTTA agree that any costs associated with this Agreement will be paid with current funds available to TxDOT;

NOW, THEREFORE, TxDOT and the NTTA, for and in consideration of the recitals set forth above and terms and conditions below, agree as follows:

I. TERM

This Agreement shall be effective when signed by the last party who's signing makes the Agreement fully executed and will remain in full force and effect for two (2) years. Any party may modify or terminate this Agreement as provided in section V. TERMINATION.

II. OBLIGATIONS OF THE PARTIES

The NTTA agrees to permit TxDOT to connect to its Dark Fiber and related infrastructure along the PGBT between Interstate Highway 75 and Interstate Highway 35E.

TxDOT shall be allowed to use only the mutually agreed upon Dark Fiber and related infrastructure as listed in Attachments A, B, and C. Any and all rights expressly granted to TxDOT shall be subject to the prior and continuing right of the NTTA to use its Dark Fiber and/or related infrastructure for its own purposes under applicable laws. Nothing in this

agreement shall be deemed to grant, convey, create, or vest in TxDOT a real property interest in land, including any fee, leasehold interest, easement, or right-of-way.

III. FEES

The NTTA agrees to waive any monetary fee associated with the use of the Dark Fiber and related infrastructure.

IV. PAYMENTS DUE

All payments for expenses incurred as a result of the performance of this Agreement shall be made by using currently available TxDOT funds.

V. TERMINATION

Either party may terminate this Agreement at any time upon thirty (30) days' written notice of termination to the other party. Upon such termination, TxDOT will immediately cease using the Dark Fiber and related infrastructure. TxDOT will immediately remove any equipment, component, or additional infrastructure required for the connection and installed by TxDOT at TxDOT's sole expense.

VI. RELEASE AND HOLD HARMLESS

Each party agrees to waive all claims against, to release, and to hold harmless the other party and its respective officials, officers, agents, employees, in both their public and private capacities, from any and all liability, claims, suits, demands, losses, damages, attorney fees, including all expenses of litigation or settlement, or causes of action which may arise by reason or injury to or death of any person or for loss of, damage to, or loss of use of any property arising out of or in connection with this Agreement. In the event that a claim is filed, each party shall be responsible for its proportionate share of liability. Each party agrees to waive all claims against and hold harmless the other party in the event of early termination of the Agreement.

VII. IMMUNITY

In the execution of this Agreement, none of the parties waive, nor shall be deemed hereby to have waived any immunity or any legal or equitable defense otherwise available against claims arising in the exercise of governmental powers and functions. By entering into this Agreement, the parties do not create any obligations, express or implied, other than those set forth herein, and this Agreement does not create any rights in parties who are not signatories to this Agreement.

VIII. ASSIGNMENT AND SUBLETTING

Each party agrees to retain control and to give full attention to the fulfillment of this Agreement, that this Agreement will not be assigned or sublet without the prior written

consent of the NTTA, and that no part or feature of the work will be sublet to anyone objectionable to the NTTA. Each party further agrees that the performance of this Agreement shall not relieve the party from its full obligations as provided by this Agreement.

IX. RELATIONSHIP OF THE PARTIES

Nothing in this Agreement shall be deemed or construed by the parties, or by any third party, as creating the relationship of principal and agent, partnership or joint venture between TxDOT and the NTTA. Each party has entered into this Agreement for separate and distinct purposes. It is not the intent of the parties that a joint enterprise relationship is being entered into and the parties specifically disclaim such relationship. This Agreement does not constitute a joint enterprise, as there are no pecuniary interests, no common purposes and no equal rights of control between the parties.

X. ENTIRE AGREEMENT

This Agreement represents the entire and integrated agreement between TxDOT and the NTTA and supersedes all prior negotiations, representations, and/or agreements, either written or oral. This Agreement may be amended only by written instrument signed by TxDOT and the NTTA.

XI. COUNTERPARTS

This Agreement may be executed in several counterparts, each of which shall be deemed an original and shall constitute one single agreement between the parties.

XII. HEADINGS

The articles and sections used in this Agreement are for reference and convenience only, and shall not enter into the interpretation hereof.

XIII. NOTICES

Unless otherwise agreed to in writing, all notices are required to be given to either party in writing and delivered in person or sent via certified mail to the other party at the following respective addresses:

Representative:

North Texas Tollway Authority
ATTN: William D. Pounds
5900 W. Plano Parkway, Suite 100
Plano, TX 75093

XIV. AUTHORITY TO SIGN

The undersigned officer and/or agents of the parties hereto are properly authorized by each party's respective governing body and have the necessary authority to execute this Agreement on behalf of the parties. Additionally, each party represents that it is individually authorized to perform the governmental functions and services that are the subject of this Agreement.

XV. SEVERABILITY

The provisions of this Agreement are severable. If any paragraph, section, subdivision, sentence, clause, or phrase of this Agreement is for any reason held to be contrary to the law or contrary to any rule or regulation having the force and effect of the law, such decisions shall not affect the remaining portions of the Agreement. However, upon the occurrence of such event, either party may terminate this Agreement by giving the other party thirty (30) days written notice of termination.

XVI. VENUE

This Agreement and any of its terms or provisions, as well as the rights and duties of the parties hereto, shall be governed by the laws of the State of Texas. The parties agree that this Agreement shall be enforceable in ^{Texas} Collin County, Texas, and if legal and necessary, exclusive venue shall lie in ^{Texas} Collin County, Texas. *as of the*

XVII. INTERPRETATION OF AGREEMENT

No provision of this Agreement shall be construed against or interpreted to the disadvantage of any party by any court or other governmental or judicial authority by reason of such party having or being deemed to have drafted, prepared, structured, or dictated such provision.

XVIII. REMEDIES

No right or remedy granted herein or reserved to the parties is exclusive of any right or remedy granted by law or equity; but each shall be cumulative of every right or remedy given hereunder. No covenant or condition of this Agreement may be waived without the express written consent of the parties. It is further agreed that one (1) or more instances of forbearance by either party in the exercise of its respective rights under this Agreement shall in no way constitute a waiver thereof.

XIX. SUCCESSORS AND ASSIGNS

The parties each bind themselves, their respective successors, executors, administrators, and assigns to the other party to this contract. Neither party will assign, sublet, subcontract or transfer any interest in this Agreement without the prior written consent of the

other party. No assignment, delegation of duties or subcontract under this Agreement will be effective without the written consent of all parties.

XX. DISPUTES

The parties agree to use any alternative dispute resolution procedure that is a part of the applicable claim procedure. The parties shall satisfy the requirement for alternative dispute resolution by participation in non-binding arbitration, unless otherwise agreed to by the parties. During the resolution of an issue, NTTA and TxDOT will not hinder work under the Agreement and such work will proceed according to the terms of this Agreement.

EXECUTED on the dates indicated below:

North Texas Tollway Authority

DATE 12-12-12

BY:

Gerald Carrigan
TITLE: Executive Director/CEO

APPROVED AS TO FORM:

[Signature]
Mark G. Hoff

THE STATE OF TEXAS

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By

[Signature]
William L. Hale, P.E.
Dallas District Engineer

Date

12/20/12

ATTACHMENT A

NTTA REGIONAL CONNECTIVITY
LEVEL F ESTIMATE

ITEM NO.	ITEM CODE	S.P. NO.	DESCRIPTION	UNIT	APPROX. QUANTITIES	Engineer's Estimate	
						UNIT PRICE	AMOUNT
US 75 Connection							
0500	0501		MOBILIZATION	LS	1	\$ 10,000.00	\$ 10,000.00
0502	0502		BARRICADES, SIGNS AND TRAFFIC HANDLING	MC	1	\$ 5,000.00	\$ 5,000.00
0508	0508		COND. (RM) (27)	LF	3,360	\$ 20.00	\$ 67,200.00
0509	0509		COND. (HOPEN) (RB) (96)	LF	76	\$ 15.00	\$ 1,140.00
0524	0524		GROUND BOX TY D (162922) (W) (APRON)	EA	2	\$ 560.00	\$ 1,120.00
0514	0514		FIBER OPTIC CBL (SINGLE - MODE) (24 FIBER)	LF	3,636	\$ 2.00	\$ 7,272.00
0511	0511		FIBER OPTIC SPLICE ENCLOSURE	EA	2	\$ 1,600.00	\$ 3,200.00
0513	0513		FIBER OPTIC CABLE ROAD MARKER	EA	1	\$ 60.00	\$ 60.00
			Site Sub-total			\$	\$ 94,872.00
IH 35E Connection							
0500	0500		MOBILIZATION	LS	1	\$ 10,000.00	\$ 10,000.00
0502	0502		BARRICADES, SIGNS AND TRAFFIC HANDLING	MC	1	\$ 5,000.00	\$ 5,000.00
0508	0508		COND. (RM) (27)	LF	524	\$ 20.00	\$ 10,480.00
0509	0509		COND. (HOPEN) (RB) (96)	LF	968	\$ 15.00	\$ 14,520.00
0524	0524		GROUND BOX TY D (162922) (W) (APRON)	EA	7	\$ 500.00	\$ 3,500.00
0514	0514		FIBER OPTIC CBL (SINGLE - MODE) (24 FIBER)	LF	1,842	\$ 2.00	\$ 3,684.00
0511	0511		FIBER OPTIC SPLICE ENCLOSURE	EA	2	\$ 1,600.00	\$ 3,200.00
0513	0513		FIBER OPTIC CABLE ROAD MARKER	EA	6	\$ 60.00	\$ 360.00
0514	0514		FIBER OPTIC CABLE ROAD MARKER - TEST STATION	EA	1	\$ 100.00	\$ 100.00
			Site Sub-total			\$	\$ 50,344.00
			Site Total			\$	\$ 145,216.00
			15% Contingency			\$	\$ 21,857.40
			Project Total			\$	\$ 167,573.40

ATTACHMENT B

NTTA FIBER HUT
US 75 SHEET 3 OF 3

AVENUE K

EXDD3 SATELLITE #12
US 75 SHEET 1 OF 3

US 75

US 75 SHEET 3 OF 3 COMPLETE

US 75 SHEET 3 OF 3

US 75 SHEET 3 OF 3

US 75 SHEET 3 OF 3

4/26/12



Alan P. McNeil

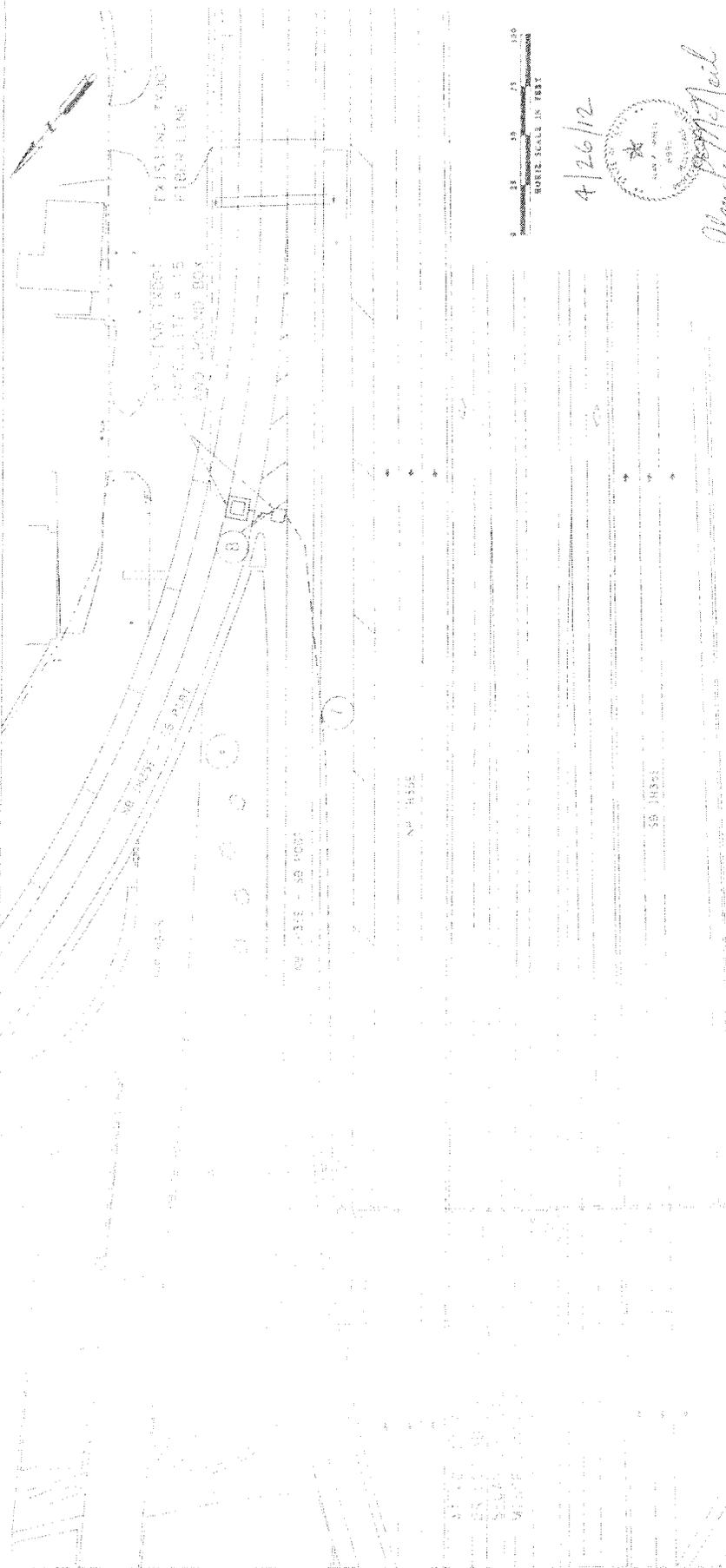
Texas Department of Transportation
©2012

PROJECT LAYOUT

PROJECT NO.	0041	PROJECT FILE NO.	19
DATE	04/26/12	ISSUE TITLE	US 75 SHEET 3 OF 3 COMPLETE
DESIGNER	COLEMAN, E.C.	CHECKER	COLEMAN, E.C.
DATE	04/26/12	DATE	04/26/12
PROJECT	US 75 SHEET 3 OF 3	PROJECT	US 75 SHEET 3 OF 3
PROJECT	US 75 SHEET 3 OF 3	PROJECT	US 75 SHEET 3 OF 3

DATE	04/26/12
PROJECT	US 75 SHEET 3 OF 3
PROJECT	US 75 SHEET 3 OF 3

ATTACHMENT C



4/26/12



Alan J. McNeil

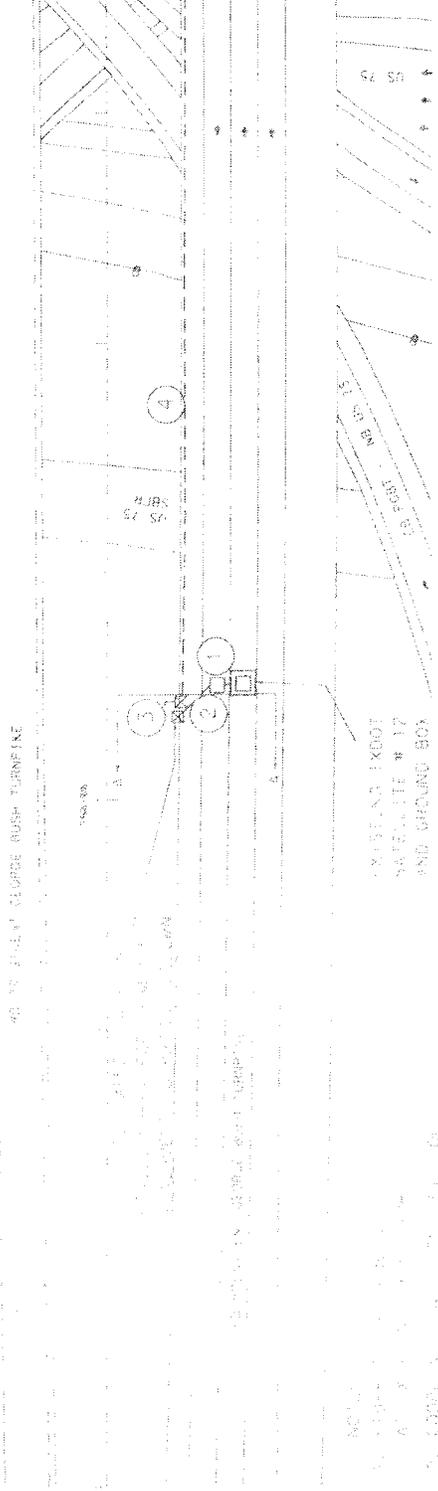
MANHOLE TIE-IN TO EXISTING FIBER OPTIC

NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	CONDUIT (12")	150	LINEAL FEET	1.50	225.00
2	MANHOLE (12")	1	UNIT	100.00	100.00
3	CONDUIT (6")	100	LINEAL FEET	1.00	100.00
4	MANHOLE (6")	1	UNIT	50.00	50.00
5	CONDUIT (4")	50	LINEAL FEET	0.75	37.50
6	MANHOLE (4")	1	UNIT	25.00	25.00
7	CONDUIT (3")	25	LINEAL FEET	0.50	12.50
8	MANHOLE (3")	1	UNIT	15.00	15.00
9	CONDUIT (2")	10	LINEAL FEET	0.30	3.00
10	MANHOLE (2")	1	UNIT	10.00	10.00
11	CONDUIT (1.5")	5	LINEAL FEET	0.20	1.00
12	MANHOLE (1.5")	1	UNIT	5.00	5.00
13	CONDUIT (1")	2	LINEAL FEET	0.15	0.30
14	MANHOLE (1")	1	UNIT	3.00	3.00
15	CONDUIT (0.75")	1	LINEAL FEET	0.10	0.10
16	MANHOLE (0.75")	1	UNIT	2.00	2.00
17	CONDUIT (0.5")	1	LINEAL FEET	0.05	0.05
18	MANHOLE (0.5")	1	UNIT	1.00	1.00
19	CONDUIT (0.25")	1	LINEAL FEET	0.02	0.02
20	MANHOLE (0.25")	1	UNIT	0.50	0.50
21	CONDUIT (0.125")	1	LINEAL FEET	0.01	0.01
22	MANHOLE (0.125")	1	UNIT	0.25	0.25
23	CONDUIT (0.0625")	1	LINEAL FEET	0.005	0.005
24	MANHOLE (0.0625")	1	UNIT	0.125	0.125
25	CONDUIT (0.03125")	1	LINEAL FEET	0.0025	0.0025
26	MANHOLE (0.03125")	1	UNIT	0.0625	0.0625
27	CONDUIT (0.015625")	1	LINEAL FEET	0.00125	0.00125
28	MANHOLE (0.015625")	1	UNIT	0.03125	0.03125
29	CONDUIT (0.0078125")	1	LINEAL FEET	0.000625	0.000625
30	MANHOLE (0.0078125")	1	UNIT	0.015625	0.015625
31	CONDUIT (0.00390625")	1	LINEAL FEET	0.0003125	0.0003125
32	MANHOLE (0.00390625")	1	UNIT	0.0078125	0.0078125
33	CONDUIT (0.001953125")	1	LINEAL FEET	0.00015625	0.00015625
34	MANHOLE (0.001953125")	1	UNIT	0.00390625	0.00390625
35	CONDUIT (0.0009765625")	1	LINEAL FEET	0.000078125	0.000078125
36	MANHOLE (0.0009765625")	1	UNIT	0.001953125	0.001953125
37	CONDUIT (0.00048828125")	1	LINEAL FEET	0.0000390625	0.0000390625
38	MANHOLE (0.00048828125")	1	UNIT	0.0009765625	0.0009765625
39	CONDUIT (0.000244140625")	1	LINEAL FEET	0.00001953125	0.00001953125
40	MANHOLE (0.000244140625")	1	UNIT	0.00048828125	0.00048828125
41	CONDUIT (0.0001220703125")	1	LINEAL FEET	0.000009765625	0.000009765625
42	MANHOLE (0.0001220703125")	1	UNIT	0.000244140625	0.000244140625
43	CONDUIT (0.00006103515625")	1	LINEAL FEET	0.0000048828125	0.0000048828125
44	MANHOLE (0.00006103515625")	1	UNIT	0.0001220703125	0.0001220703125
45	CONDUIT (0.000030517578125")	1	LINEAL FEET	0.00000244140625	0.00000244140625
46	MANHOLE (0.000030517578125")	1	UNIT	0.00006103515625	0.00006103515625
47	CONDUIT (0.0000152587890625")	1	LINEAL FEET	0.000001220703125	0.000001220703125
48	MANHOLE (0.0000152587890625")	1	UNIT	0.000030517578125	0.000030517578125
49	CONDUIT (0.00000762939453125")	1	LINEAL FEET	0.0000006103515625	0.0000006103515625
50	MANHOLE (0.00000762939453125")	1	UNIT	0.0000152587890625	0.0000152587890625
51	CONDUIT (0.000003814697265625")	1	LINEAL FEET	0.00000030517578125	0.00000030517578125
52	MANHOLE (0.000003814697265625")	1	UNIT	0.00000762939453125	0.00000762939453125
53	CONDUIT (0.0000019073486328125")	1	LINEAL FEET	0.000000152587890625	0.000000152587890625
54	MANHOLE (0.0000019073486328125")	1	UNIT	0.000003814697265625	0.000003814697265625
55	CONDUIT (0.00000095367431640625")	1	LINEAL FEET	0.0000000762939453125	0.0000000762939453125
56	MANHOLE (0.00000095367431640625")	1	UNIT	0.0000019073486328125	0.0000019073486328125
57	CONDUIT (0.000000476837158203125")	1	LINEAL FEET	0.00000003814697265625	0.00000003814697265625
58	MANHOLE (0.000000476837158203125")	1	UNIT	0.00000095367431640625	0.00000095367431640625
59	CONDUIT (0.0000002384185791015625")	1	LINEAL FEET	0.000000019073486328125	0.000000019073486328125
60	MANHOLE (0.0000002384185791015625")	1	UNIT	0.000000476837158203125	0.000000476837158203125
61	CONDUIT (0.00000011920928955078125")	1	LINEAL FEET	0.0000000095367431640625	0.0000000095367431640625
62	MANHOLE (0.00000011920928955078125")	1	UNIT	0.0000002384185791015625	0.0000002384185791015625
63	CONDUIT (0.000000059604644775390625")	1	LINEAL FEET	0.00000000476837158203125	0.00000000476837158203125
64	MANHOLE (0.000000059604644775390625")	1	UNIT	0.00000011920928955078125	0.00000011920928955078125
65	CONDUIT (0.0000000298023223876953125")	1	LINEAL FEET	0.000000002384185791015625	0.000000002384185791015625
66	MANHOLE (0.0000000298023223876953125")	1	UNIT	0.000000059604644775390625	0.000000059604644775390625
67	CONDUIT (0.00000001490116119384765625")	1	LINEAL FEET	0.0000000011920928955078125	0.0000000011920928955078125
68	MANHOLE (0.00000001490116119384765625")	1	UNIT	0.0000000298023223876953125	0.0000000298023223876953125
69	CONDUIT (0.000000007450580596923828125")	1	LINEAL FEET	0.00000000059604644775390625	0.00000000059604644775390625
70	MANHOLE (0.000000007450580596923828125")	1	UNIT	0.00000001490116119384765625	0.00000001490116119384765625
71	CONDUIT (0.0000000037252902984619140625")	1	LINEAL FEET	0.000000000298023223876953125	0.000000000298023223876953125
72	MANHOLE (0.0000000037252902984619140625")	1	UNIT	0.000000007450580596923828125	0.000000007450580596923828125
73	CONDUIT (0.00000000186264514923095703125")	1	LINEAL FEET	0.0000000001490116119384765625	0.0000000001490116119384765625
74	MANHOLE (0.00000000186264514923095703125")	1	UNIT	0.0000000037252902984619140625	0.0000000037252902984619140625
75	CONDUIT (0.000000000931322574615478515625")	1	LINEAL FEET	0.00000000007450580596923828125	0.00000000007450580596923828125
76	MANHOLE (0.000000000931322574615478515625")	1	UNIT	0.00000000186264514923095703125	0.00000000186264514923095703125
77	CONDUIT (0.0000000004656612873077392828125")	1	LINEAL FEET	0.000000000037252902984619140625	0.000000000037252902984619140625
78	MANHOLE (0.0000000004656612873077392828125")	1	UNIT	0.000000000931322574615478515625	0.000000000931322574615478515625
79	CONDUIT (0.00000000023283064365386964140625")	1	LINEAL FEET	0.0000000000186264514923095703125	0.0000000000186264514923095703125
80	MANHOLE (0.00000000023283064365386964140625")	1	UNIT	0.0000000004656612873077392828125	0.0000000004656612873077392828125
81	CONDUIT (0.000000000116415321826934820703125")	1	LINEAL FEET	0.00000000000931322574615478515625	0.00000000000931322574615478515625
82	MANHOLE (0.000000000116415321826934820703125")	1	UNIT	0.00000000023283064365386964140625	0.00000000023283064365386964140625
83	CONDUIT (0.0000000000582076609134674103515625")	1	LINEAL FEET	0.000000000004656612873077392828125	0.000000000004656612873077392828125
84	MANHOLE (0.0000000000582076609134674103515625")	1	UNIT	0.000000000116415321826934820703125	0.000000000116415321826934820703125
85	CONDUIT (0.00000000002910383045673370517578125")	1	LINEAL FEET	0.0000000000023283064365386964140625	0.0000000000023283064365386964140625
86	MANHOLE (0.00000000002910383045673370517578125")	1	UNIT	0.0000000000582076609134674103515625	0.0000000000582076609134674103515625
87	CONDUIT (0.000000000014551915228366852587890625")	1	LINEAL FEET	0.00000000000116415321826934820703125	0.00000000000116415321826934820703125
88	MANHOLE (0.000000000014551915228366852587890625")	1	UNIT	0.00000000002910383045673370517578125	0.00000000002910383045673370517578125
89	CONDUIT (0.0000000000072759576141834262939453125")	1	LINEAL FEET	0.000000000000582076609134674103515625	0.000000000000582076609134674103515625
90	MANHOLE (0.0000000000072759576141834262939453125")	1	UNIT	0.000000000014551915228366852587890625	0.000000000014551915228366852587890625
91	CONDUIT (0.00000000000363797880709171314697265625")	1	LINEAL FEET	0.0000000000002910383045673370517578125	0.0000000000002910383045673370517578125
92	MANHOLE (0.00000000000363797880709171314697265625")	1	UNIT	0.0000000000072759576141834262939453125	0.0000000000072759576141834262939453125
93	CONDUIT (0.000000000001818989403545856573486964140625")	1	LINEAL FEET	0.00000000000014551915228366852587890625	0.00000000000014551915228366852587890625
94	MANHOLE (0.000000000001818989403545856573486964140625")	1	UNIT	0.00000000000363797880709171314697265625	0.00000000000363797880709171314697265625
95	CONDUIT (0.000000000000909494701772928287890625")	1	LINEAL FEET	0.000000000000072759576141834262939453125	0.000000000000072759576141834262939453125
96	MANHOLE (0.000000000000909494701772928287890625")	1	UNIT	0.000000000001818989403545856573486964140625	0.000000000001818989403545856573486964140625
97	CONDUIT (0.0000000000004547473508864143939453125")	1	LINEAL FEET	0.0000000000000363797880709171314697265625	0.0000000000000363797880709171314697265625
98	MANHOLE (0.0000000000004547473508864143939453125")	1	UNIT	0.000000000000909494701772928287890625	0.000000000000909494701772928287890625
99	CONDUIT (0.00000000000022737367544320719697265625")	1	LINEAL FEET	0.00000000000001818989403545856573486964140625	0.00000000000001818989403545856573486964140625
100	MANHOLE (0.00000000000022737367544320719697265625")	1	UNIT	0.0000000000004547473508864143939453125	0.0000000000004547473508864143939453125

NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	CONDUIT (12")	150	LINEAL FEET	1.50	225.00
2	MANHOLE (12")	1	UNIT	100.00	100.00
3	CONDUIT (6")	100	LINEAL FEET	1.00	100.00
4	MANHOLE (6")	1	UNIT	50.00	50.00
5	CONDUIT (4")	50	LINEAL FEET	0.75	37.50
6	MANHOLE (4")	1	UNIT	25.00	25.00
7	CONDUIT (3")	25	LINEAL FEET	0.50	12.50
8	MANHOLE (3")	1	UNIT	15.00	15.00
9	CONDUIT (2")	10	LINEAL FEET	0.30	3.00



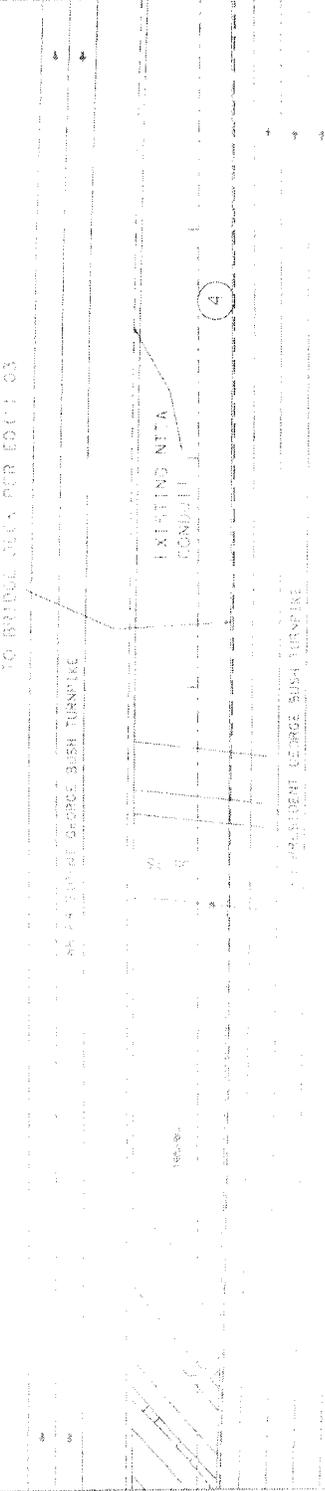
MATCH LINE STA 763+50



LEGEND

①	CONDUIT BOX NUMBER
□	PREPARED ENDPOINT
□	GROUND BOX TYPE B OR OTHER
⊗	WORK AREA BOX

MATCH LINE STA 770+00



MATCH LINE STA 765+50

Texas Department of Transportation
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"IIS" PLAN
US 75 AT P.G.B. I.

SCALE: 1"=450'	SHEET: 05	OF: 22
REVISION:	DATE:	BY:
1	11/11/11	ALAN P. McNeil
2	04/26/12	ALAN P. McNeil
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4/26/12



Alan P. McNeil

SHEET SUMMARY

ITEM	DESCRIPTION	UNIT	QTY
1	CONDUIT	LF	100
2	CONDUIT	LF	100
3	CONDUIT	LF	100
4	CONDUIT	LF	100
5	CONDUIT	LF	100
6	CONDUIT	LF	100
7	CONDUIT	LF	100
8	CONDUIT	LF	100
9	CONDUIT	LF	100
10	CONDUIT	LF	100
11	CONDUIT	LF	100
12	CONDUIT	LF	100
13	CONDUIT	LF	100
14	CONDUIT	LF	100
15	CONDUIT	LF	100
16	CONDUIT	LF	100
17	CONDUIT	LF	100
18	CONDUIT	LF	100
19	CONDUIT	LF	100
20	CONDUIT	LF	100
21	CONDUIT	LF	100
22	CONDUIT	LF	100

* SUBSIDIARY TO ITEM 618
* SUBSIDIARY TO ITEM 604

ITEM	DESCRIPTION	UNIT	QTY
1	CONDUIT	LF	100
2	CONDUIT	LF	100
3	CONDUIT	LF	100
4	CONDUIT	LF	100
5	CONDUIT	LF	100
6	CONDUIT	LF	100
7	CONDUIT	LF	100
8	CONDUIT	LF	100
9	CONDUIT	LF	100
10	CONDUIT	LF	100
11	CONDUIT	LF	100
12	CONDUIT	LF	100
13	CONDUIT	LF	100
14	CONDUIT	LF	100
15	CONDUIT	LF	100
16	CONDUIT	LF	100
17	CONDUIT	LF	100
18	CONDUIT	LF	100
19	CONDUIT	LF	100
20	CONDUIT	LF	100
21	CONDUIT	LF	100
22	CONDUIT	LF	100



MATCH LINE STA 776+50

EXISTING METEORIC CONDUIT

80' METEORIC CONDUIT BUSH TURNPIKE

10' METEORIC CONDUIT BUSH TURNPIKE

(3)

NOTE:

CONTINUED A. CONSTRUCTION
 ACTIVITIES ON P.O.B.T. BRIDGE
 WITH METEORIC CONDUIT MAINTENANCE DEPARTMENT.

MATCH LINE STA 783+00

DRY BALDWIN CROSSING

EXISTING METEORIC CONDUIT

Texas Department of Transportation
 02012

"ITS" PLAN
 US 75 AT P.O.B.T.

SCALE: 1"=40'	SHEET 2 OF 3
SECTION: 06	FEDERAL AID PROJECT NO.:
STATE: TEXAS	FEDERAL AID DISTRICT NO.:
COUNTY: TARRANT	SHEET NO. OF TOTAL SHEETS:
CONTRACT NO.:	CONTRACT DATE:
DATE OF ISSUE:	DATE OF REVISION:
BY: [Signature]	DATE: 4/26/12

4/26/12

Seal: State of Texas, Department of Transportation, 4/26/12

Alan P. McNeil

LEGEND

(Symbol)	EXISTING METEORIC CONDUIT
(Symbol)	PROPOSED CONDUIT
(Symbol)	DEBRIS STRIP 3' W. ROAD
(Symbol)	SECTION BOX

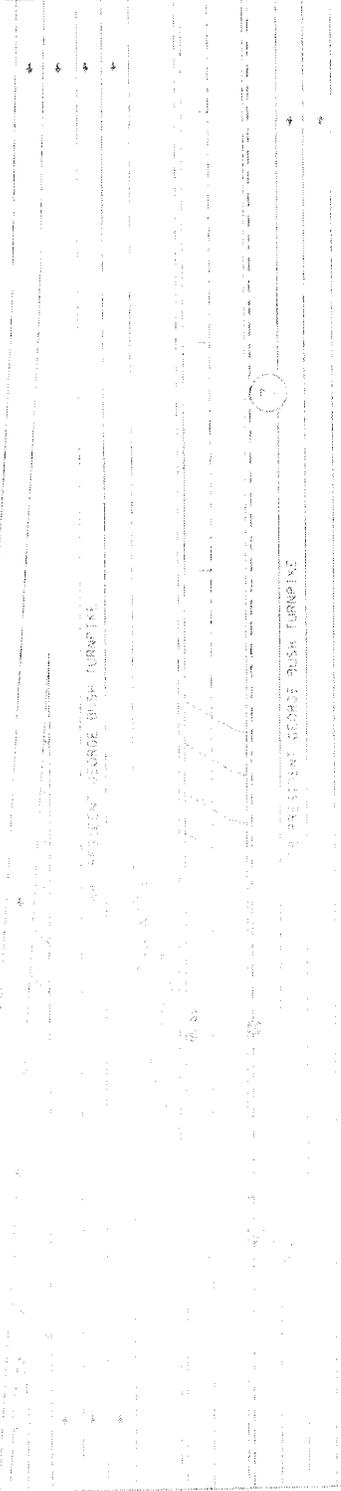
NO.	DATE	DESCRIPTION
1	4/26/12	ISSUED FOR CONSTRUCTION
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		

NO.	DATE	DESCRIPTION
1	4/26/12	ISSUED FOR CONSTRUCTION
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		

NO.	DATE	DESCRIPTION
1	4/26/12	ISSUED FOR CONSTRUCTION
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		



WATCH LINE STA 759.50



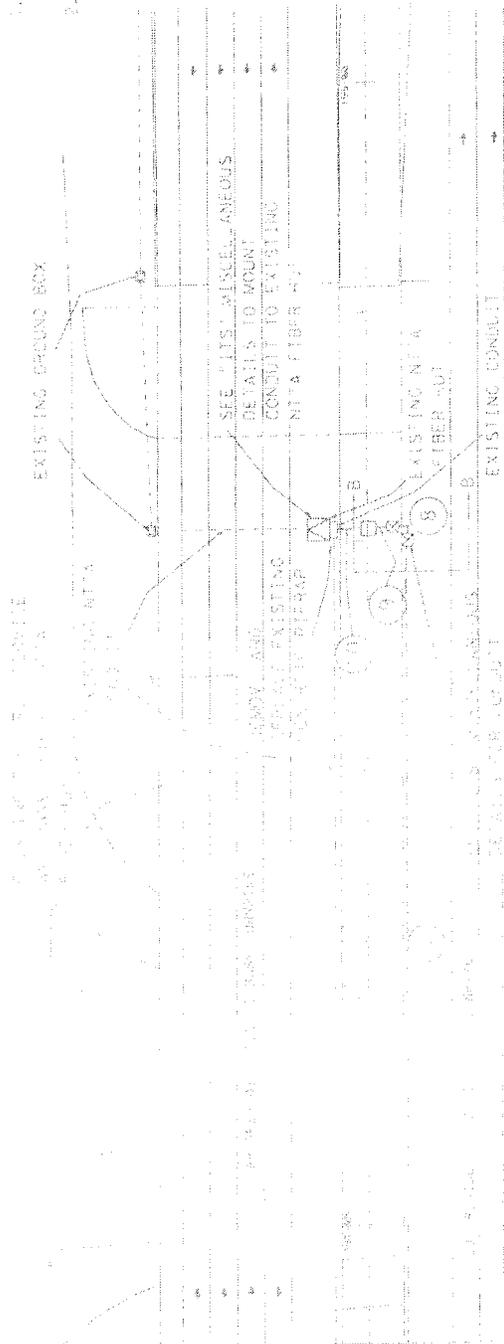
NOTES:

1. FIBER TO BE TERMINATED AT EXISTING NITA HUT.
2. COORDINATE ALL CONSTRUCTION ACTIVITIES ON OR ADJACENT TO FIBER HUT WITH NITA HUT AND MAINTENANCE DEPARTMENTS.

4/26/12



Alan P. Appel



LEGEND

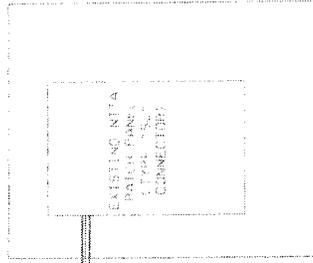
(Symbol)	CIRCUIT RUN NUMBER
(Symbol)	PROPOSED CONDUIT
(Symbol)	GROUND BOX TYPE 0 W/ JUNCTION
(Symbol)	ACCESSORY BOX

NO.	DESCRIPTION	SEE SHEET	REV.	DATE
1	ADD NITA FIBER HUT	15	1	04/26/12
2	ADD GROUND BOX TYPE 0	16	1	04/26/12
3	ADD FIBER OPTIC TRAY ENCASEMENT	17	1	04/26/12
4	ADD FIBER OPTIC PATCH PANEL	18	1	04/26/12
5	ADD FIBER OPTIC PATCH PANEL	19	1	04/26/12
6	ADD FIBER OPTIC PATCH PANEL	20	1	04/26/12
7	ADD FIBER OPTIC PATCH PANEL	21	1	04/26/12
8	ADD FIBER OPTIC PATCH PANEL	22	1	04/26/12

NO.	DESCRIPTION	SEE SHEET	REV.	DATE
1	ADD NITA FIBER HUT	15	1	04/26/12
2	ADD GROUND BOX TYPE 0	16	1	04/26/12
3	ADD FIBER OPTIC TRAY ENCASEMENT	17	1	04/26/12
4	ADD FIBER OPTIC PATCH PANEL	18	1	04/26/12
5	ADD FIBER OPTIC PATCH PANEL	19	1	04/26/12
6	ADD FIBER OPTIC PATCH PANEL	20	1	04/26/12
7	ADD FIBER OPTIC PATCH PANEL	21	1	04/26/12
8	ADD FIBER OPTIC PATCH PANEL	22	1	04/26/12

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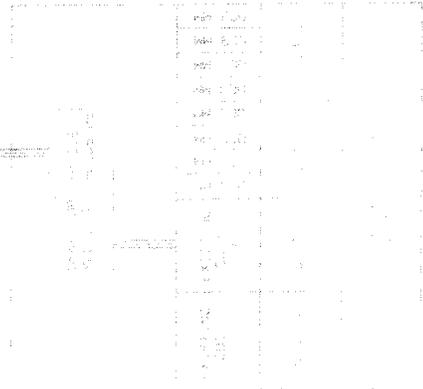
ITS PLAN
US 75 AT P.O.B.T.
SHEET 3 OF 3
FEDERAL AID PROJECT NO. 00000000
STATE TITLE SHEET IS A
DISTRICT COUNTY
DATE 04/26/12
DRAWN BY JAS/MS/ETC. 24
CHECKED BY JAS/MS/ETC.
DATE 04/26/12



EXISTING INTA FIBER HIT (LOCATED AT IN JOSEPH INTERCHANGE)



REMOVE AND REINSTALL CABLES FOR FIBERS



4/26/12



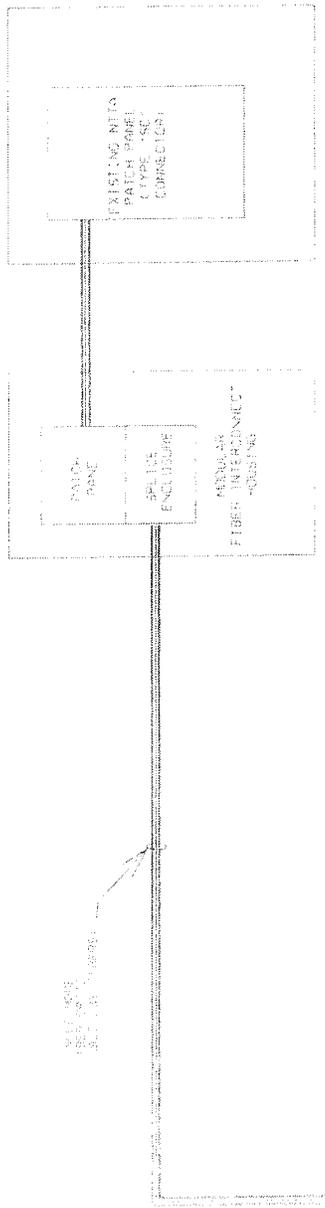
Alan J. P. April

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FIBER OPTIC BLOCK DIAGRAM

DESIGN NO.	6	FISCAL A.D. PROJECT NO.		SHEET 1 OF 2
DATE	4/26/12	SEE TITLE SHEET	US 75, EN	
STATE	TEXAS	DISTRICT	04	
CITY	HOUSTON	SECTION	13	
PROJECT	COLLINS, ETC.	POST		25
APP		DATE		

SCALE	AS SHOWN
DATE	
BY	
CHECKED	
IN CHARGE	



EXISTING NITA FIBER HUB
 (LOCATED AT AVENUE K/POD INTERFERENCE)



4/26/12



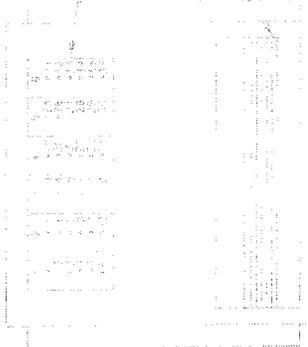
Alan J. McNeil

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 © 2012

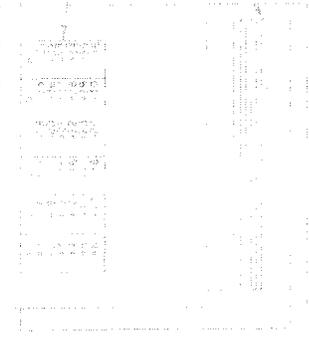
FIBER OPTIC
 BLOCK DIAGRAM

SECTION		SHEET 2 OF 2	
DK	FEDERAL AID PROJECT NO.	6	148, ETC.
DK	STATE DISTRICT	6	148, ETC.
DK	COUNTY	COLLIN	148, ETC.
DK	CITY	IRVING	148, ETC.
DK	SECTION	26	148, ETC.
DK	APM	0041	148, ETC.

APR 26 2012 10:00 AM
 148, ETC.



FIBER TERMINATION RACKS
 CONNECTED TO B-245 & B-247
 (SEE TITLE SHEET)
 (SEE TABLE)



FIBER TERMINATION RACKS
 CONNECTED TO B-245 & B-247
 (SEE TITLE SHEET)
 (SEE TABLE)

FIBER NUMBER	FIBER COLOR	BUFFER TUBE COLOR	FIBER FUNCTION	CONNECTOR NUMBER	CONNECTOR MODULE	SPLICED TRAY NUMBER
1	BLUE	BLUE	SPICES 7 TERMINATE	1	1	1
2	ORANGE	BLUE	507-815 TO NITA FIBER 245	2	1	1
3	GREEN	BLUE	507-815 FROM NITA FIBER 247	3	1	1
4	BROWN	BLUE	FUTURE	4	1	1
5	BROWN	BLUE	FUTURE	5	1	1
6	SLATE	BLUE	FUTURE	6	1	1
7	SLATE	BLUE	FUTURE	7	1	1
8	VARIOUS	GREEN & BROWN	FUTURE	8-12	2	2
9-24	VARIOUS	SLATE & WHITE	FUTURE	25-36	5,6	3

FIBER NUMBER	FIBER COLOR	BUFFER TUBE COLOR	FIBER FUNCTION	CONNECTOR NUMBER	CONNECTOR MODULE	SPLICED TRAY NUMBER
1	BLUE	BLUE	507-815 TO NITA FIBER 245	1	1	1
2	ORANGE	BLUE	507-815 FROM NITA FIBER 247	2	1	1
3	GREEN	BLUE	FUTURE	3	1	1
4	BROWN	BLUE	FUTURE	4	1	1
5	BROWN	BLUE	FUTURE	5	1	1
6	SLATE	BLUE	FUTURE	6	1	1
7	SLATE	BLUE	FUTURE	7	1	1
8	VARIOUS	GREEN & BROWN	FUTURE	8-12	2	2
9-24	VARIOUS	SLATE & WHITE	FUTURE	25-36	5,6	3

4/26/12



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FIBER TERMINATION CHARTS

SYSTEM	DATE	REVISION	PROJECT NO.	SHEET NO.
DK	5		(SEE TITLE SHEET) 1615, 1616	27
DK	6			
DK	7			
RAC	TEVAS	10	COLLIN, ETC.	
APM	COIT	06	1481, ETC.	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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LINE NUMBER	FIBER COLOR	FIBER TYPE	FIBER FUNCTION	CONNECTION NUMBER	CONNECTION MODULE	SP. USE TRAY NUMBER
1	ORANGE	PL	PL	1		
2	BROWN	PL	PL	2		
3	BROWN	PL	PL	3		
4	WHITE	PL	PL	4		
5	VARIOUS	DRAGON	PL	5		
6	VARIOUS	GREEN & BROWN	PL	6		
7	VARIOUS	SLATE BLUE	PL	7		
8	VARIOUS	SLATE BLUE	PL	8		
9	VARIOUS	SLATE BLUE	PL	9		
10	VARIOUS	SLATE BLUE	PL	10		
11	VARIOUS	SLATE BLUE	PL	11		
12	VARIOUS	SLATE BLUE	PL	12		
13	VARIOUS	SLATE BLUE	PL	13		
14	VARIOUS	SLATE BLUE	PL	14		
15	VARIOUS	SLATE BLUE	PL	15		
16	VARIOUS	SLATE BLUE	PL	16		
17	VARIOUS	SLATE BLUE	PL	17		
18	VARIOUS	SLATE BLUE	PL	18		
19	VARIOUS	SLATE BLUE	PL	19		
20	VARIOUS	SLATE BLUE	PL	20		
21	VARIOUS	SLATE BLUE	PL	21		
22	VARIOUS	SLATE BLUE	PL	22		
23	VARIOUS	SLATE BLUE	PL	23		
24	VARIOUS	SLATE BLUE	PL	24		
25	VARIOUS	SLATE BLUE	PL	25		
26	VARIOUS	SLATE BLUE	PL	26		
27	VARIOUS	SLATE BLUE	PL	27		
28	VARIOUS	SLATE BLUE	PL	28		
29	VARIOUS	SLATE BLUE	PL	29		
30	VARIOUS	SLATE BLUE	PL	30		

Labels on
Module

Labels on
Module

FIBER TRAY NUMBER: 1000
 FIBER TRAY NUMBER: 1000
 FIBER TRAY NUMBER: 1000

LINE NUMBER	FIBER COLOR	FIBER TYPE	FIBER FUNCTION	CONNECTION NUMBER	CONNECTION MODULE	SP. USE TRAY NUMBER
1	ORANGE	PL	PL	1		
2	BROWN	PL	PL	2		
3	BROWN	PL	PL	3		
4	WHITE	PL	PL	4		
5	VARIOUS	DRAGON	PL	5		
6	VARIOUS	GREEN & BROWN	PL	6		
7	VARIOUS	SLATE BLUE	PL	7		
8	VARIOUS	SLATE BLUE	PL	8		
9	VARIOUS	SLATE BLUE	PL	9		
10	VARIOUS	SLATE BLUE	PL	10		
11	VARIOUS	SLATE BLUE	PL	11		
12	VARIOUS	SLATE BLUE	PL	12		
13	VARIOUS	SLATE BLUE	PL	13		
14	VARIOUS	SLATE BLUE	PL	14		
15	VARIOUS	SLATE BLUE	PL	15		
16	VARIOUS	SLATE BLUE	PL	16		
17	VARIOUS	SLATE BLUE	PL	17		
18	VARIOUS	SLATE BLUE	PL	18		
19	VARIOUS	SLATE BLUE	PL	19		
20	VARIOUS	SLATE BLUE	PL	20		
21	VARIOUS	SLATE BLUE	PL	21		
22	VARIOUS	SLATE BLUE	PL	22		
23	VARIOUS	SLATE BLUE	PL	23		
24	VARIOUS	SLATE BLUE	PL	24		
25	VARIOUS	SLATE BLUE	PL	25		
26	VARIOUS	SLATE BLUE	PL	26		
27	VARIOUS	SLATE BLUE	PL	27		
28	VARIOUS	SLATE BLUE	PL	28		
29	VARIOUS	SLATE BLUE	PL	29		
30	VARIOUS	SLATE BLUE	PL	30		

Labels on
Module

FIBER TRAY NUMBER: 1000
 FIBER TRAY NUMBER: 1000
 FIBER TRAY NUMBER: 1000

4/26/12



Alan P. McNeil

FIBER TERMINATION CHARTS

REVISED	DATE	BY	DESCRIPTION
OK	6/18/11	6	FEDERAL ID PROJECT NO.
OK	6/18/11	6	STATE PROJECT NO.
OK	6/18/11	6	(SEE TITLE SHEETS) DISTRICT
OK	6/18/11	6	COUNTY
OK	6/18/11	6	SECTION
OK	6/18/11	6	POST MILE
OK	6/18/11	6	CONTRACT
OK	6/18/11	6	DATE
OK	6/18/11	6	BY
OK	6/18/11	6	APPV

SHEET 2 OF 2

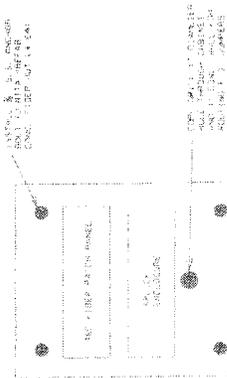


FIGURE 1
CABINET EQUIPMENT

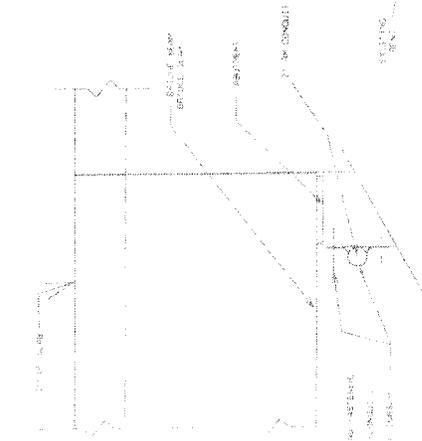


FIGURE 2
CABINET EQUIPMENT

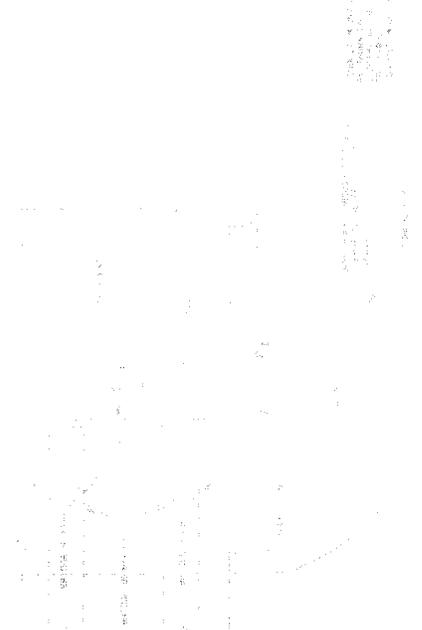


FIGURE 3
CABINET EQUIPMENT

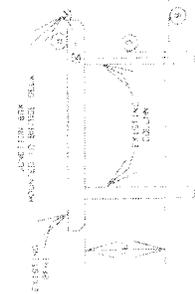


FIGURE 4
CABINET EQUIPMENT

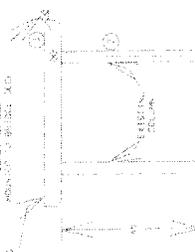


FIGURE 5
CABINET EQUIPMENT

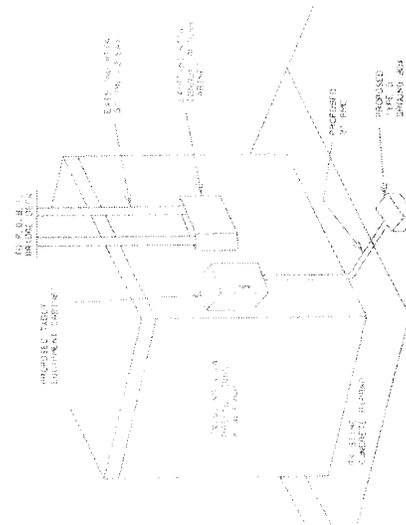


FIGURE 6
CABINET EQUIPMENT

CONDUIT ENTRIES
PLAN SECTION (B-B)

4/26/12

 Alan H. McNeil

Texas Department of Transportation

"ITS" MISCELLANEOUS DETAILS SHEET

PROJECT NO.	0611	SECTION	06	SHEET NO.	29
DATE	06/11/12	PROJECT NAME	148, ETC.	PROJECT LOCATION	
DESIGNED BY		CHECKED BY		APPROVED BY	
DRAWN BY		DATE			

PROPOSED CONDUIT ENTRY TO
 USE 1/2" POLYBUTYLENE TEREPHTHALATE