



LIVE LIFE OUTSIDE

November 10, 2016

RE: Notice to Bidders
Great Rivers Greenway District
Centennial Greenway Phase IIA
Federal Project Number: TAP-9900(677)
Burns & McDonnell Project Number: 85395
Addendum Number 03

Organizations intending to submit a bid on Centennial Greenway Phase IIA are hereby advised of the following additions and modifications to the bidding documents:

1. The bid form is revised. Use bid form attached to Addendum 3. Bid form updated for new pay items and quantity modifications as discussed in item 2 below.
2. Below are responses to questions received by the construction manager.

- a. **Question** - *Plan Sheet 2B-1, Concrete Pavement (8" Non-Reinf) has a quantity of 195 sy on Sheet L-102 and 162 sy. Is this a duplicate of the same area?*

Answer – *162 square yards is the quantity of 8" Non-Reinforced concrete pavement. Changes made to sheets 2B-1 and 2B-5, see attached.*

- b. **Question** - *The drainage items (MSD Area Inlet, 12" Class III RCP, and 12" FES) listed on Plans Sheet 2B-5 for Add Alternate 2 are duplicated on plan sheet 2B-3 for the base bid items.*

Answer – *The duplicate quantities of three items (MSD Area Inlet, 12" Class III RCP, and 12" FES) for Add Alternate 2 have been removed from sheet 2B-5, see attached.*

- c. **Question** - *Bid form issued with Addendum has language at the bottom of Page 8 about the BMP/Seeding Contractor. Additionally there is a header at the top of the pdf pages. These do not show in the Excel version provided. We would like to fill in the form electronically and then print off for submission instead of writing in all numbers. Can an Excel version be provided with these items?*

Answer – Utilize excel copy for bid tabulation provided by Engineer. Provide a separate sheet of paper designating the BMP/Seeding Contractor and attach to completed bid form.

- d. **Question** – Reference sheet C-020 Access Plan. Note 9. Is the intent of this note that the Contractor is to install metal street plates from Site 1A access point to the bridge? 1200 feet of plates is a lot and nor cheap.

Answer – The design intent is to only use plates when crossing the greenway. Anticipated crossing greenway once or twice and would anticipate a maximum of 40 linear feet of plates for the project.

- e. **Question** – Item 94 – Temporary Contractor Access – JSP 76 states this is for commercial entrances at locations not shown on plans, which we interpret to mean at locations that we deem necessary for construction. However, the JSP goes on to state that the Engineer will give us the design for such entrances, yet we assume all costs. It would seem that this should either be a unit price or design provided prior to bid, as well as a quantity, so that contractor and engineer are on the same page prior to bid. Otherwise, contractor may assume a design far less involved than what engineer will produce after bid.

Answer – Replace the word “Commercial Entrances” with “Temporary Construction Access Points” in JSP 76.

Design is provided prior to bid. Utilize MoDOT standard plan 203.62 available at: http://www.modot.org/business/standards_and_specs/documents/20362.pdf. Minimum access point width shall be 24-feet and radius to be 30-feet with 5:1 taper. Utilize 18-inch corrugated metal pipe, Contractor to determine length of this pipe. Other items that are incidental to this bid item are listed in JSP 76. Surfacing for temporary entrance shall be a minimum 6-inches Type 5 Aggregate Base.

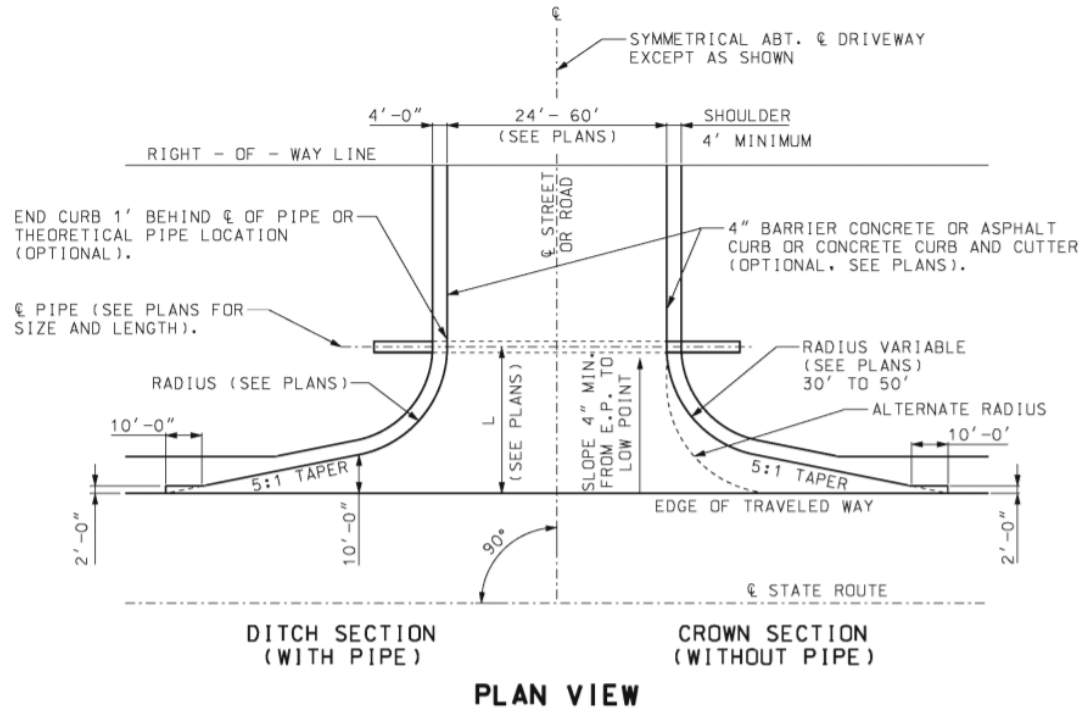


Figure 1: Plan view from MoDOT standard drawing 203.62

f. **Question - Quantity Discrepancies 2A:**

Concrete Pavement – Sheet 2B-1 notes 492 SY on C-101. C-101 shows 565 SY (10 + 124 + 88 + 343)

Answer – The quantity shall be 565 square yards. See attached revised 2B-1 sheet.

Note: Two new pay items for pavement replacement on MoDOT Routes 364, Route 94 and Ramp are added to project. These two pay items shall replace the 8-inch Non-Reinforced Concrete Pavement. The two new pay items are:

14" Non-Reinforced Concrete Pavement
4" Permeable Base

See updated sheet 2B-1 and typical sections attached to this addendum.

- j. **Question** - *Standard MoDOT Drawings in JSP 500 have a detail for Barrier C Retaining Wall showing a gutter behind it. There is no quantity for this gutter in the bid form. Is it not required?*

Answer – *Concrete gutter behind Barrier C Retaining Wall is not required.*

- k. **Question** - *Metal Benches, Trash Receptacles and Bike Racks note to match existing. Does owner know manufacturer or model numbers of these items, so that we can ensure a match in our bid?*

Answer – *The manufacturer and model number of Metal Benches, Trash Receptacles and Bike Racks are not known. Design intent is to provide a match from a Saint Louis metropolitan manufacturer for this product.*

- l. **Question** - *Is the 8" concrete pad shown on T-103 to be included in the cost of the Bike Shelter or where is this concrete paid for?*

Answer – *Concrete pad is not included in cost of Bike Shelter. Concrete pad and base are included in the following two pay items on project:*

Item number 1 – Type 5 Aggregate for Base (4-inches Thick)

Item 2 - Concrete Pavement 8" Non-Reinforced

- m. **Question** - *Please provide manufacture, model number, and color for the bench, trash receptacle, and bike rack. The plans just state to match the ones in Heritage Park but we really need this information to match correctly.*

Answer – *See answer to question K above.*

- n. **Question** - *On page JSP 418-19, the graphic pattern is shown. I interpret this detail to show that that the dimensionless Bridge Face Plate height is intended to be the height of the steel panels that fit inside the bridge chords. So any part of the graphic that is hatched would not be shown on the bridge. Is this correct?*

Answer – *This is correct. Hatched area is not shown on bridge. Unhatched area is to be painted on the steel face panels. No graphic painting on chords.*

- o. **Question** - *I am working with a signing provider for the wayfinding signs. He has hit a road block on getting pricing on the high pressure laminate panels from I-zone printing. Please see comment below, My question is are the wayfinding signs a contractor bid*



item? If so how can we get pricing from I-Zone for the printed high pressure laminate panels needed for the below mentioned signs?

Wayfinding signs (11)GX-5, (3)KX-1, (8)RX-1, & (1)IN-1 all require high pressure laminate panels produced and printed by I-Zone imaging, I just spoke with the president iZone and he is unable to provide pricing to us. He mentioned a company in Alabama just recently won a 3 year contract for the signage for all of the GRG projects.

Answer – *Contractor to determine the wayfinding sign costs for each sign. Great Rivers Greenway has a pre-qualified supplier for wayfinding signage. If another supplier is proposed, Contractor shall obtain approval of supplier during the shop drawing review process from Great Rivers Greenway.*

The pre-qualified manufacturer contact information is as follows:

Manufacturer Name: *Image Manufacturing Group*
Address: *5405 Buford Highway*
Suite #270
Norcross, GA 30071
Office Phone Number: *(678) 580-3281 extension 103*
Mobile Phone Number: *(770) 286-7702*
Fax Number: *(678) 256-3885*
Contact Representative: *Dan Bryant*
E-mail of Contact Representative: dbryant@imgarchitectural.com

=====

ACKNOWLEDGEMENT
ADDENDUM NO. 3

(Please Sign and Include With Bid)

Addendum Received By: _____ Date _____
(Signature of Authorized Representative)

Name: _____ Title: _____
(Printed Name of Authorized Representative)

=====



LIVE LIFE OUTSIDE

Sincerely,

Dennis Koscielski, P.E.
Design Team Project Manager

DK/DK

cc: MoDOT – Vince G. Kaimann
GRG – Patrick Owens
Construction Manager – Craig Schluter
Alta – Paul Wojciechowski
Cole – Jeremy Roach

BID FORM: Centennial Greenway - Phase IIA (Addendum 3)						
ITEM NO.	BID ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	ITEM COST
FEDERALLY REIMBURSED ITEMS						
1	JSP-28	TYPE 5 AGGREGATE FOR BASE (4 IN. THICK)	SY	4,600 1664		
2	JSP-35A	CONCRETE PAVEMENT (8" NON-REINF)	SY	4,226 458		
2A	Addendum 3 Item 1	4" PERMEABLE BASE	SY	832		
2B	Addendum 3 Item 2	14" NON-REINFORCED CONCRETE PAVEMENT	SY	832		
3	JSP-39	4" PERFORATED PVC UNDERDRAIN	LF	207		
4	JSP-40	OUTLET PIPES AND SPLASH PADS	EA	2		
5	JSP-41	GUARDRAIL TYPE A	LF	250		
6	JSP-42	BRIDGE ANCHOR SECTION	EA	5		
7	JSP-43	TRANSITION SECTION	EA	5		
8	JSP-44	TYPE A CRASHWORTHY END TERMINAL	EA	3		
9	JSP-50	6" CONCRETE MEDIAN STRIP	SY	16		
10	JSP-51	CONCRETE CURB TYPE S	LF	376		
11	JSP-52	CURB AND GUTTER TYPE B	LF	83		
12	JSP-55	CONCRETE TRAFFIC BARRIER, TYPE D	LF	643		
13	JSP-56	CONCRETE TRAFFIC BARRIER, TYPE C (RETAINING WALL)	LF	359		
14	JSP-57	CONCRETE TRAFFIC BARRIER, TYPE C	LF	154		
15	JSP-304A	CONSTRUCTION SIGNS	SF	1,237		
16	JSP-304B	CHANNELIZER	EA	571		
17	JSP-304C	TYPE III MOVABLE BARRICADE (THREE LANE)	EA	5		
18	JSP-304D	TYPE III MOVABLE BARRICADE (ONE LANE)	EA	7		
19	JSP-304E	FLASHING ARROW PANEL	EA	17		
20	JSP-304F	IMPACT ATTENUATOR (9 SAND BARRELS)	EA	9		
21	JSP-304G	CHANGEABLE MESSAGE SIGN	EA	11		
22	JSP-304H	TUBULAR MARKER (FLEXIBLE DELINEATOR)	EA	7		

Note: Bid Form available as Excel file from Construction Manager.

Craig Schluter

Navigate Building Solutions

Phone: 314-713-6205

E-mail: craig@navigatebuildingsolutions.com

BID FORM: Centennial Greenway - Phase IIA (Addendum 3)

23	JSP-305	TEMPORARY CONCRETE TRAFFIC BARRIER	LF	3,286		
24	JSP-401	CLASS 1 EXCAVATION	CY	282		
25	JSP-402	BRIDGE APPROACH SLAB	SY	68		
26	JSP-403	DRILLED SHAFTS 3FT 0IN DIAMETER	LF	83		
27	JSP-404	ROCK SOCKETS 2FT 6IN DIAMETER	LF	16		
28	JSP-405	ROCK SOCKETS 3FT 0IN DIAMETER	LF	100		
29	JSP-406	SUPPLEMENTARY TELEVISION CAMERA INSPECTION	EA	4		
30	JSP-407	FOUNDATION INSPECTION HOLES	LF	156		
31	JSP-408	SONIC LOGGING TESTING	EA	4		
32	JSP-409A	STRUCTURAL STEEL PILES (12 IN)	LF	1,688		
33	JSP-409B	STRUCTURAL STEEL PILES (14 IN)	LF	370		
34	JSP-410	DYNAMIC PILE TESTING	EA	10		
35	JSP-411	PRE-BORE FOR PILING	LF	253		
36	JSP-412	PILE POINT REINFORCEMENT	EA	34		
37	JSP-413	CLASS B CONCRETE (SUBSTRUCTURE)	CY	253		
38	JSP-414	SLAB ON STEEL	SY	546		
39	JSP-415	REINFORCING STEEL (BRIDGES)	LB	58,490		
40	JSP-416	PROTECTIVE COATING - CONCRETE BENTS AND PIERS (EPOXY)	EA	6		
41	JSP-417	EXPANSION DEVICE (FLAT PLATE)	LF	60		
42	JSP-418	PREFABRICATED TRUSS PEDESTRIAN BRIDGE	SF	4,910		
43	JSP-419	VERTICAL DRAIN AT END BENTS	EA	4		
44	JSP-420	LAMINATED NEOPRENE BEARING PAD ASSEMBLY	EA	8		
45	JSP-421	TYPE N PTFE BEARING	EA	8		
46	JSP-422	CORRUGATED METAL PIPE PILE SPACERS	EA	24		

BID FORM: Centennial Greenway - Phase IIA (Addendum 3)

LOCALLY FUNDED ITEMS						
47	JSP-21	CLEARING AND GRUBBING	AC	9.9		
48	JSP-22	TEMPORARY TREE PROTECTION	LF	1,102		
49	JSP-23	REMOVAL OF IMPROVEMENTS	LS	1		
50	JSP-24	FULL DEPTH SAW-CUT	LF	1,447.3		
51	JSP-25	CLASS A EXCAVATION	CY	40,853		
52	JSP-26	COMPACTING EMBANKMENT	CY	34,996		
53	JSP-27	SETTLEMENT GAUGES	EA	8		
54	JSP-29	TYPE 5 AGGREGATE FOR BASE (8 IN. THICK)	SY	4,112		
55	JSP-30	GRAVEL (A)	TON	154		
56	JSP-31	BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1)	TON	367		
57	JSP-32	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)	TON	367		
58	JSP-33	PRIME COAT	GAL	1,378		
59	JSP-34	TACK COAT	GAL	331		
60	JSP-35C	CONCRETE TRAIL APPROACH SLAB	SY	68		
61	JSP-36A	MSD AREA INLET	EA	4		
62	JSP-36B	MSD CURB INLET	EA	3		
63	JSP-36C	MSD GRATE INLET	EA	2		
64	JSP-36D	MSD MANHOLE	EA	5		
65	JSP-37A	12" CLASS III RCP	LF	540		
66	JSP-37B	15" CLASS IV RCP	LF	109		
67	JSP-37C	18" CLASS IV RCP	LF	208		
68	JSP-38A	12" PRE-CAST CONCRETE FLARED END SECTION	EA	2		
69	JSP-38B	18" PRE-CAST CONCRETE FLARED END SECTION	EA	2		

BID FORM: Centennial Greenway - Phase IIA (Addendum 3)

70	JSP-45A	60" CHAIN LINK FENCE	LF	462		
71	JSP-45B	60" CHAIN LINK FENCE ON RETAINING WALLS AND SLOPES	LF	1,533		
72	JSP-47	CONCRETE SIDEWALK	SY	108		
73	JSP-48	DETECTABLE WARNING PANELS	SF	184		
74	JSP-49	CONCRETE CURB RAMP	SY	198		
75	JSP-53A	FURNISHING TYPE 2 ROCK BLANKET	CY	55		
76	JSP-53B	PLACING TYPE 2 ROCK BLANKET	CY	55		
77	JSP-59	MOBILIZATION	LS	1		
78	JSP-60	CONTRACTOR SURVEYING AND STAKING	LS	1		
79	JSP-61	PROTECTION AND RESTORATION OF SITE	LS	1		
80	JSP-62	RETAINING WALL DRAINAGE SYSTEMS	LS	1		
81	JSP-63	WETCAST MODULAR BLOCK WALL	SF	2,589		
82	JSP-64	MECHANICALLY STABILIZED EARTH WALL SYSTEMS	SF	11,434		
83	JSP-65	WATER POLLUTION CONTROL MANAGER	WEEK	45		
84	JSP-66	COMPOST SOCK SILT BARRIER	LF	8,130		
85	JSP-67	SEDIMENT REMOVAL	CY	150		
86	JSP-68	INLET PROTECTION	EA	30		
87	JSP-69	EROSION CONTROL BLANKET	SY	41,458		
88	JSP-70	PERMANENT EROSION CONTROL BLANKET	SY	1,180		
89	JSP-71	TEMPORARY SEEDING AND MULCHING	AC	9		
90	JSP-72	COMPOST SOCK DITCH CHECK	EA	67		
91	JSP-73	WASHDOWN STATION	EA	6		
92	JSP-74	CONSTRUCTION ENTRANCES	EA	6		

BID FORM: Centennial Greenway - Phase IIA (Addendum 3)

93	JSP-75	STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	LS	1		
94	JSP-76	TEMPORARY CONTRACTOR ACCESS	LS	1		
95	JSP-77	TYPE 1 TURF REINFORCEMENT MAT	SY	3,032		
96	JSP-78	OUTLET PROTECTION MAT	SF	256		
97	JSP-79	TRENCHING TYPE I	LF	982		
98	JSP-80	PULL BOX, PREFORMED CLASS 1	EA	9		
99	JSP-81	CABLE-CONDUIT, 1 IN., 2 CONDUCTORS AND 1 BARE NEUTRAL, 2 AWG	LF	1,030		
100	JSP-82	INSTALL OWNER FURNISHED BIKE COUNTERS	EA	2		
101	JSP-83A	GROUND IMPROVEMENT SYSTEM (WALL 1)	LS	1		
102	JSP-83B	GROUND IMPROVEMENT SYSTEM (WALL 2)	LS	1		
103	JSP-83C	GROUND IMPROVEMENT SYSTEM (WALL 3)	LS	1		
104	JSP-83D	GROUND IMPROVEMENT SYSTEM (WALL 4)	LS	1		
105	JSP-83E	GROUND IMPROVEMENT SYSTEM (WALL 5)	LS	1		
106	JSP-84	LAW ENFORCEMENT	ALLOWANCE	1		
107	JSP-85	ADDITIONAL MOBILIZATION FOR SEEDING	EA	16		
108	JSP-205	NATIVE GRASS PLANTING AREAS	SY	10,332		
109	JSP-206A	FESCUE SEED	AC	9.2		
110	JSP-206B	FESCUE SOD	SY	1,082		
111	JSP-207A	BENCHES	EA	3		
112	JSP-207B	TRASH RECEPTACLES	EA	3		
113	JSP-207C	BIKE RACKS	EA	3		
114	JSP-212	DECORATIVE BOLLARD	EA	6		
115	JSP-301	DOUBLE-SIDED RECTANGULAR RAPID FLASHING BEACON WITH PEDESTRIAN PUSH BUTTON	EA	2		
116	JSP-302A	24" PERMANENT WHITE PAVEMENT MARKING	LF	72		
117	JSP-302B	4" SOLID YELLOW PAVEMENT MARKING	LF	266		
118	JSP-302C	HIGH VISIBILITY CROSSWALK	LF	66		
119	JSP-303B	ROADWAY SIGNS	SF	134		
120	JSP-303C	GROUND MOUNTED SIGN POST (ROADWAY)	EA	12		
121	JSP-303E	BRIDGE WEIGHT LIMIT SIGNS	EA	4		

BID FORM: Centennial Greenway - Phase IIA (Addendum 3)

LOCALLY FUNDED ITEMS (ADD ALTERNATE 1)

122	A-JSP-211	WAYFINDING SIGNAGE (SEE JSP FOR SIGN TYPES)	EA	53		
123	A-JSP-303A	TRAIL SIGNS	SF	58		
124	A-JSP-303C	GROUND MOUNTED SIGN POST (TRAIL)	EA	20		
125	A-JSP-303D	PRAIRIE RESTORATION SIGNS	EA	10		

LOCALLY FUNDED ITEMS (ADD ALTERNATE 2)

126	B-JSP-25	CLASS A EXCAVATION	CY	250		
127	B-JSP-26	COMPACTING EMBANKMENT	CY	1,828		
128	B-JSP-28	TYPE 5 AGGREGATE FOR BASE (4 IN. THICK)	SY	204 197		
129	B-JSP-29	TYPE 5 AGGREGATE FOR BASE (8 IN. THICK)	SY	278		
130	B-JSP-30	GRAVEL (A)	TON	11		
131	B-JSP-31	BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1)	TON	26		
132	B-JSP-32	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)	TON	26		
133	B-JSP-33	PRIME COAT	GAL	98		
134	B-JSP-34	TACK COAT	GAL	24		
135	B-JSP-35A	CONCRETE PAVEMENT (8" NON-REINF)	SY	2 164		
136	B-JSP-35B	CONCRETE PAVEMENT (12" NON-REINF)	SY	40 33		
137	B-JSP-36A	MSD AREA INLET	EA	5 2		
138	B-JSP-37A	12" CLASS III RCP	LF	483 105		
139	B-JSP-38A	12" PRE-CAST CONCRETE FLARED END SECTION	EA	3 2		

BID FORM: Centennial Greenway - Phase IIA (Addendum 3)

140	B-JSP-54	GROUTED COMPOST	LS	1		
141	B-JSP-72	COMPOST SOCK DITCH CHECK	EA	24		
142	B-JSP-77	TYPE 1 TURF REINFORCEMENT MAT	SY	802		
143	B-JSP-201A	DECIDUOUS SHADE / STREET TREE	EA	77		
144	B-JSP-201B	EVERGREEN TREE	EA	24		
145	B-JSP-201C	FLOWERING/ORNAMENTAL TREE	EA	82		
146	B-JSP-201D	SHRUBS AND ORNAMENTAL GRASSES	EA	681		
147	B-JSP-202	PERENNIALS	EA	1,007		
148	B-JSP-203	MULCH	CY	171		
149	B-JSP-204	PLANTING SOIL	CY	1,532		
150	B-JSP-208	CONCRETE UNIT PAVERS	SF	1,455		
151	B-JSP-209A	MULTI-PIECE PRECAST FREESTANDING SEAT WALL	SF	325		
152	B-JSP-209B	SEAT WALL COPING	LF	135		
LOCALLY FUNDED ITEMS (ADD ALTERNATE 3)						
153	C-JSP-46	DECORATIVE PEDESTRIAN GUARDRAIL	LF	1,533		
LOCALLY FUNDED ITEMS (ADD ALTERNATE 4)						
154	D-JSP-210	BIKE SHELTER	EA	1		
LOCALLY FUNDED ITEMS (ADD ALTERNATE 5)						
155	E-JSP-154	YEAR 1 LANDSCAPE MAINTENANCE	EA	1		
LOCALLY FUNDED ITEMS (ADD ALTERNATE 6)						
156	F-JSP-155	YEAR 2 LANDSCAPE MAINTENANCE	EA	1		
LOCALLY FUNDED ITEMS (ADD ALTERNATE 7)						
157	G-JSP-156	YEAR 3 LANDSCAPE MAINTENANCE	EA	1		

BID FORM: Centennial Greenway - Phase IIA (Addendum 3)	
FEDERALLY REIMBURSED ITEMS SUBTOTAL =	
LOCALLY FUNDED ITEMS SUBTOTAL =	
ADD ALTERNATE 1 SUBTOTAL =	
ADD ALTERNATE 2 SUBTOTAL =	
ADD ALTERNATE 3 SUBTOTAL =	
ADD ALTERNATE 4 SUBTOTAL =	
ADD ALTERNATE 5 SUBTOTAL =	
ADD ALTERNATE 6 SUBTOTAL =	
ADD ALTERNATE 7 SUBTOTAL =	
TOTAL BID AMOUNT =	

Bid Requirement:

The following providers are qualified by Great Rivers Greenway District to provide the installation of the Native Seed Mixes.

Barker Horticultural Services, LLC
DJM Ecological Services,
Landesign, LLC
Two Alpha Contracting

If a sub-contractor not listed above is proposed to complete installation of Native Seed Mixes, the sub-contractor shall complete qualification with Great Rivers Greenway seven (7) days prior to the bid opening time specified in the Notice to Bidders.

Please indicate below which planting contractor has been included in your bid:

BMP/Seeding Contractor Used: _____

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND, THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATIONS OF ALL UNDERGROUND UTILITIES AS EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS, AND SHALL BE LOCATED PRIOR TO CONSTRUCTION.

FEDERAL ID NUMBER: TAP 9900 677

JOEL J. BIRKE
PROFESSIONAL ENGINEER
LICENSE NO. 2014016927

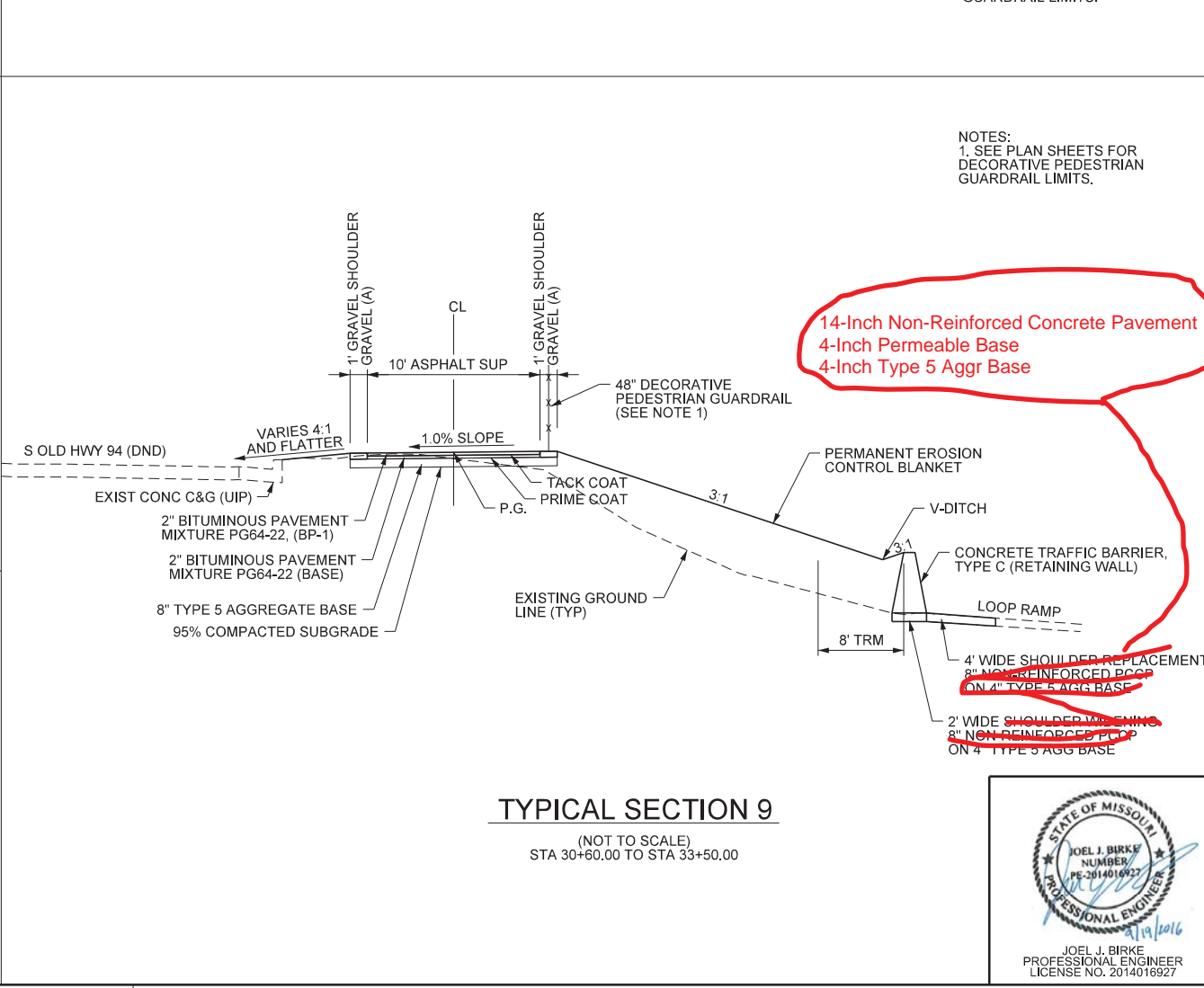
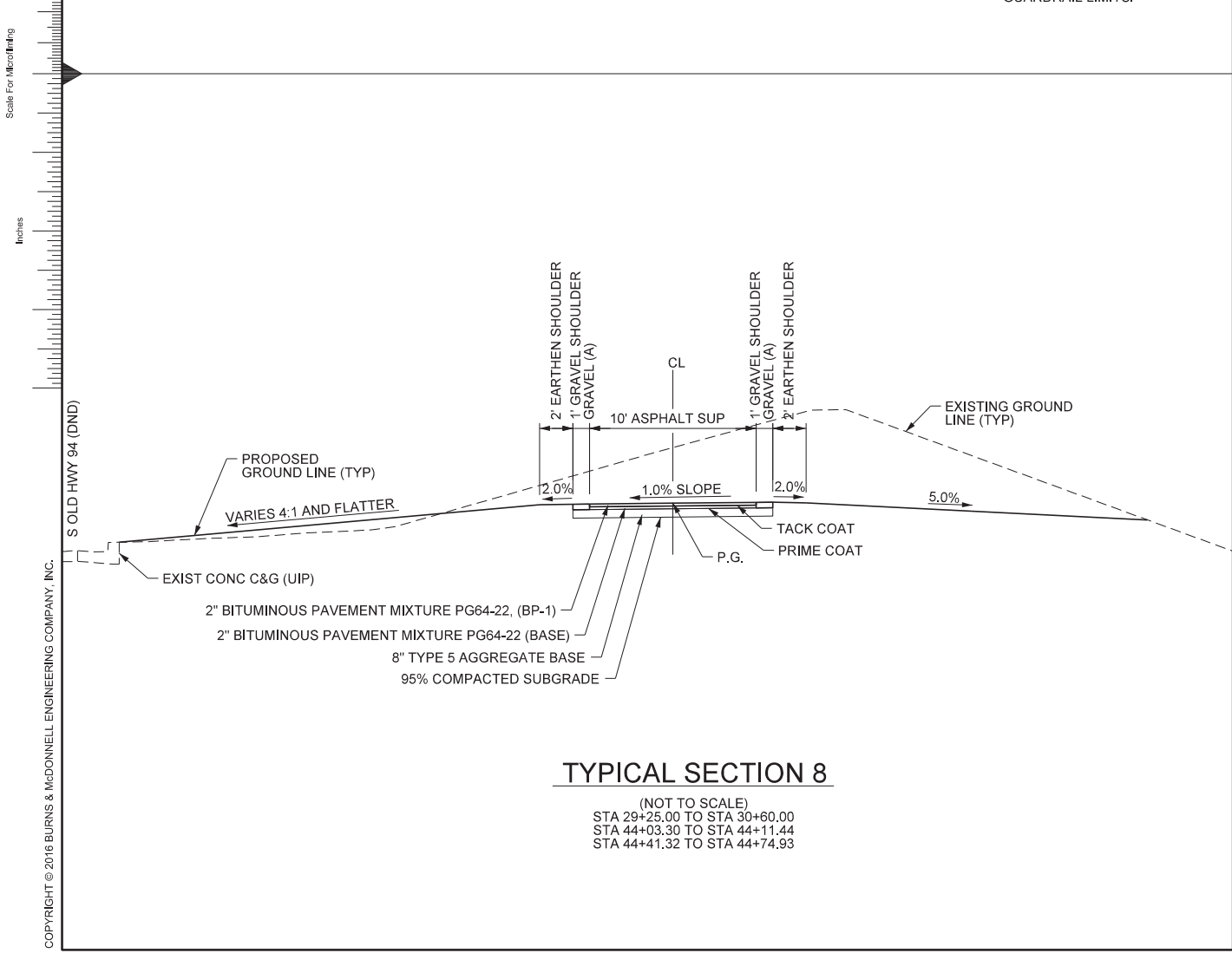
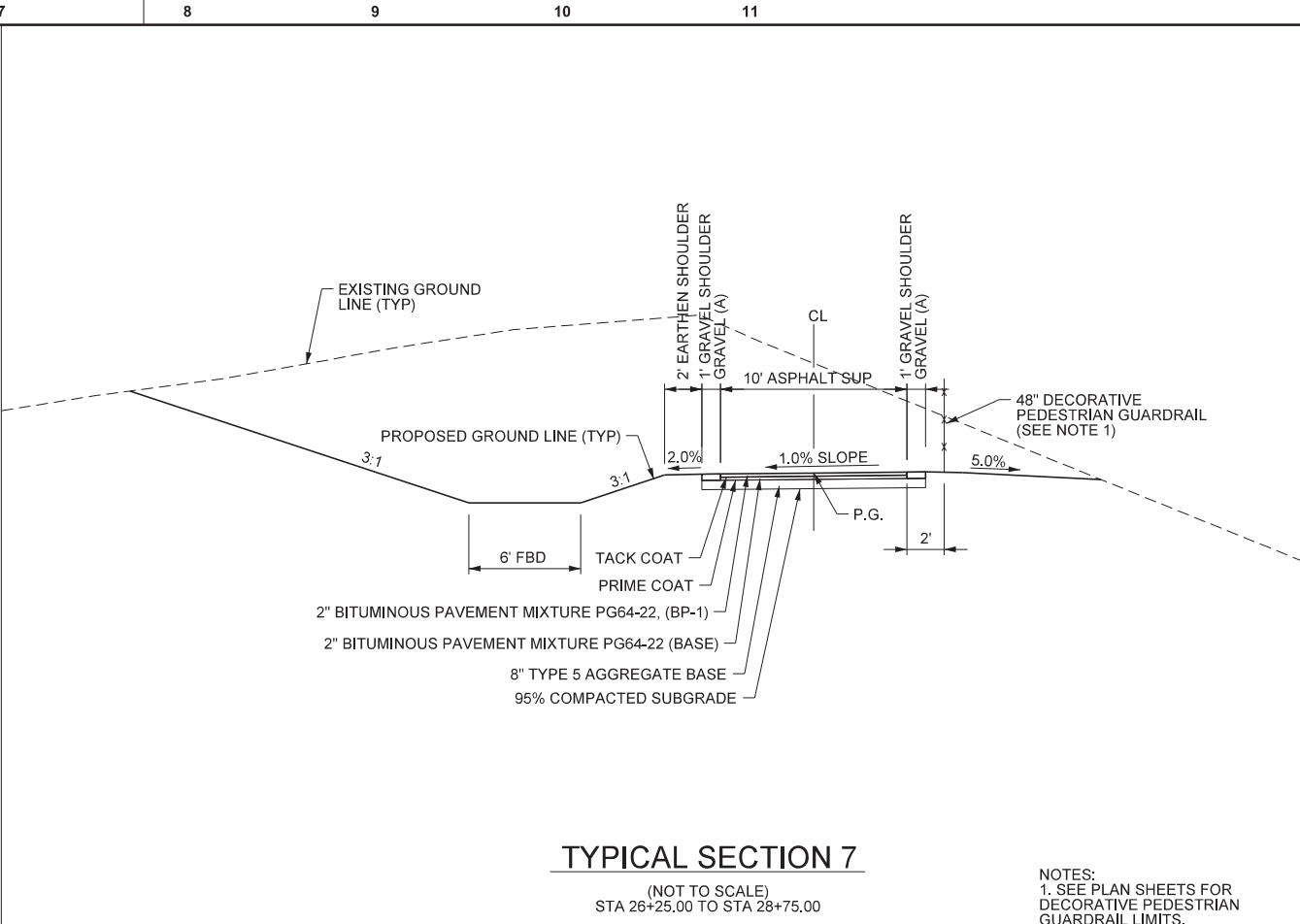
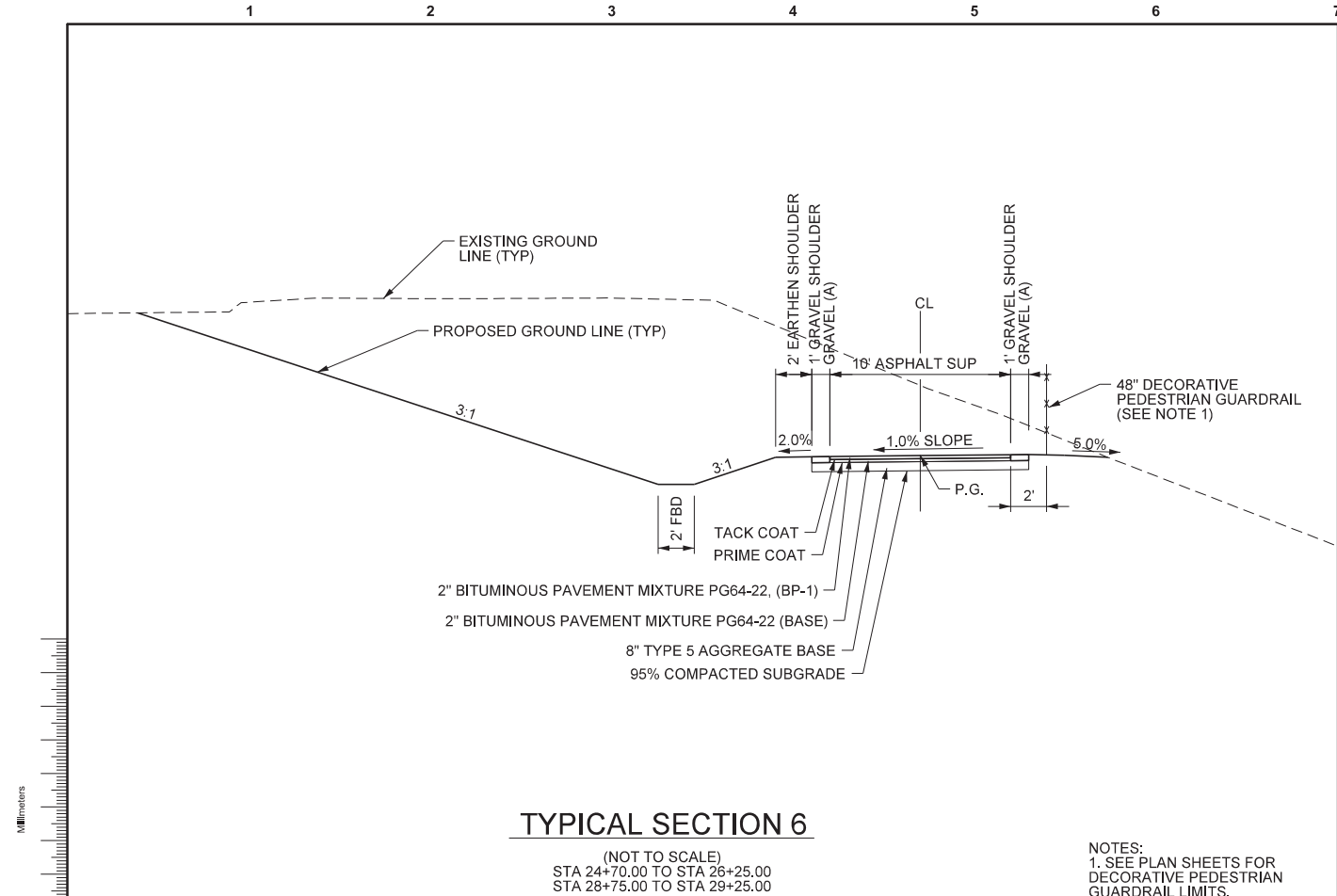


file: Z:\C:\Users\TRNGuest\OneDrive\Centerville\Biology\CACD\Road Theory\SSS5_C0226-1_SUMMARY OF QUANTITIES.docx

FEDERAL ID NUMBER: TAP 9900 677

file: z:\csm\TECHNICAL\05101 California\Boulder\CA00Road_Brow\05101 CA001A SUMMARY OF QUANTITATIVE



[illegible][illegible]




no.	date	by	chd	description
0	9/19/16	JB	DK	ISSUED FOR BID

FEDERAL ID NUMBER: TAP 9900 677


UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND, THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATIONS OF ALL UNDERGROUND UTILITIES AS EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS, AND SHALL BE LOCATED PRIOR TO CONSTRUCTION.





425 SOUTH WOODS MILL ROAD
CHESTERFIELD, MISSOURI 63017
314-682-1500
ENG. 000165

date September 2016	detailed J. Birke
designed J. Birke	checked D. Koscielski




GREAT RIVERS GREENWAY
CENTENNIAL GREENWAY PHASE IIA

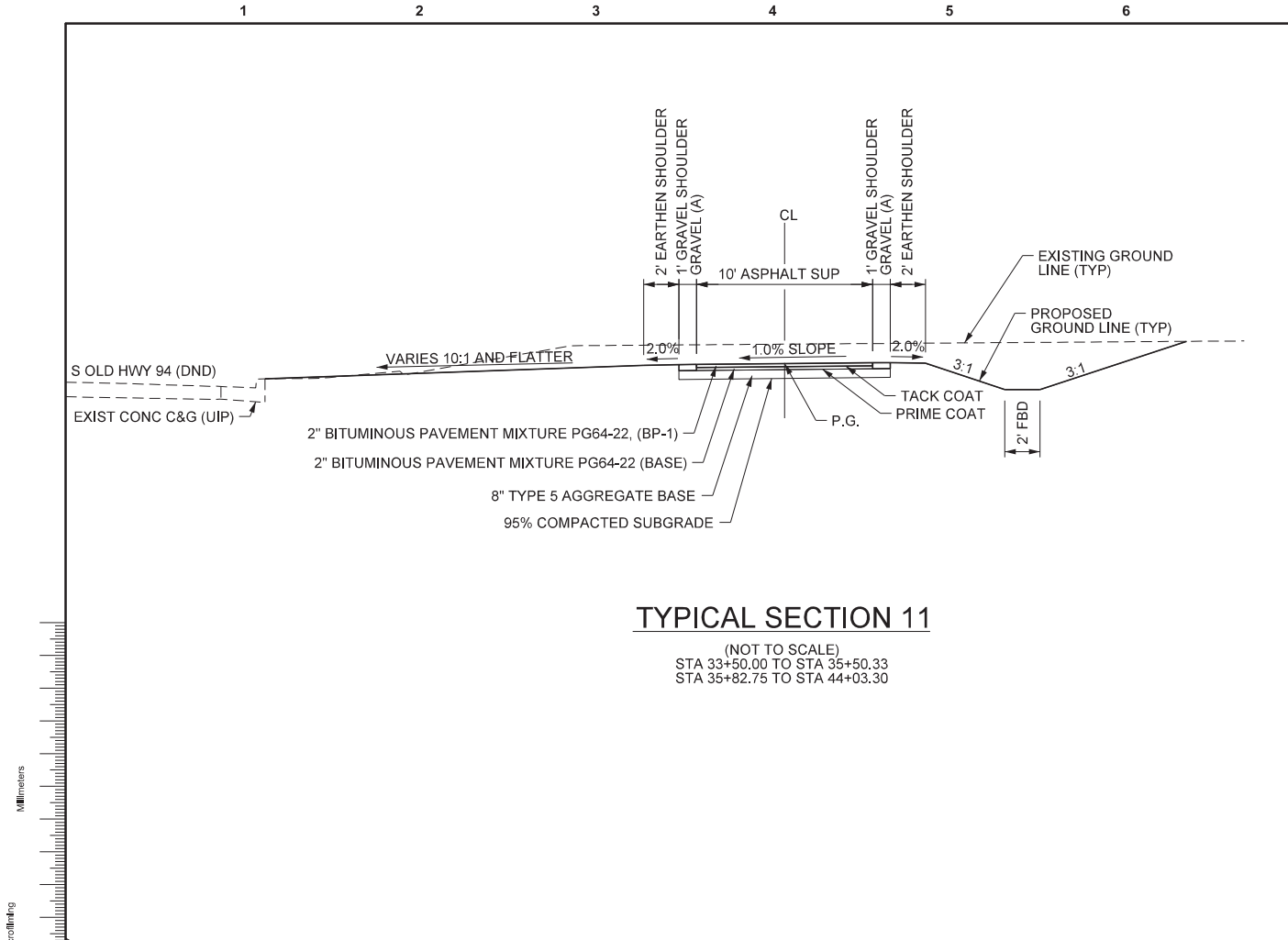
TYPICAL SECTIONS

project 85395	contract
drawing C-004	rev. 0

file: Z:\C:\Users\TODD\OneDrive\85395_Centennial\Bids\Design\C420\Road_Shown\85395_C420_Typical Sections.dgn

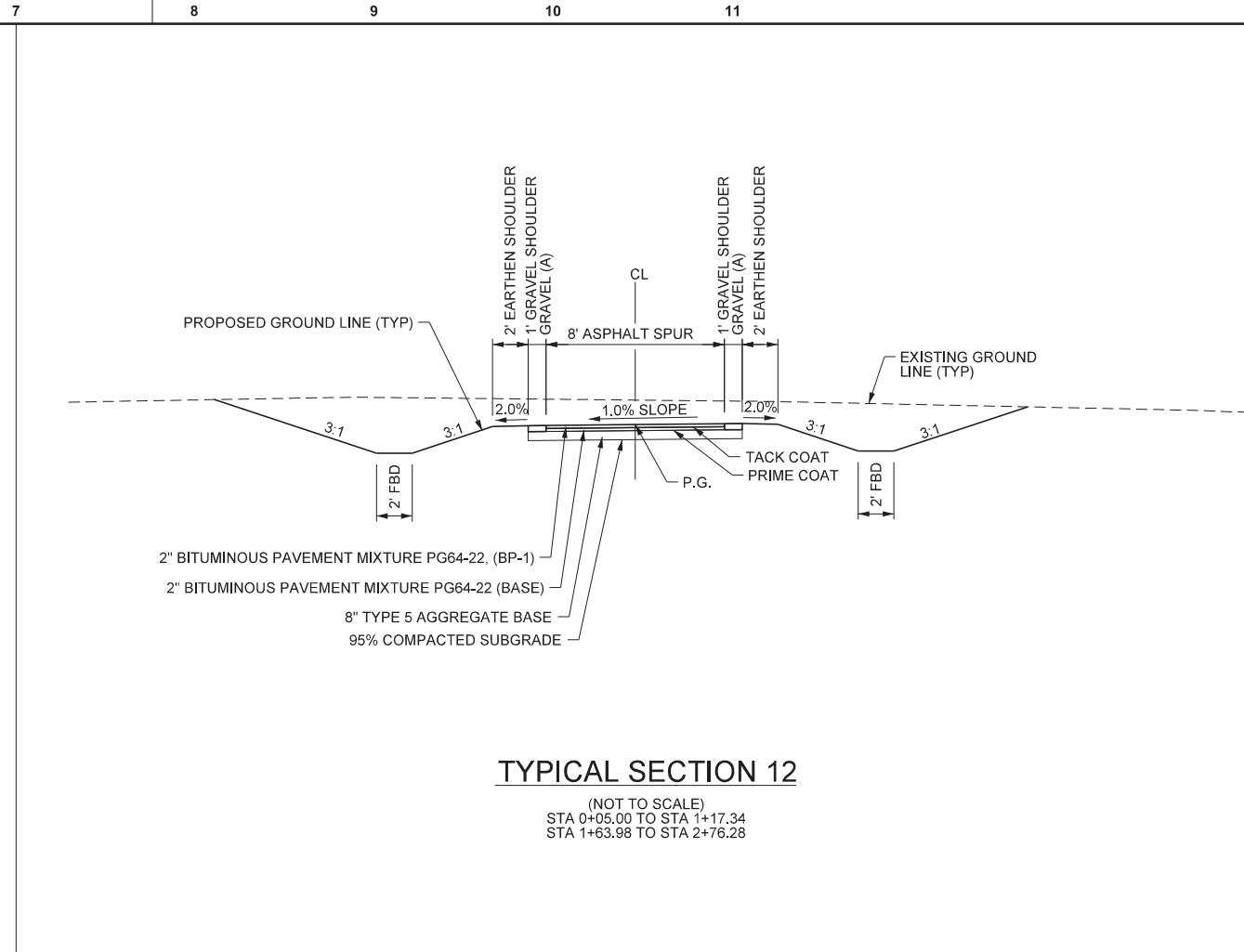


JOEL J. BIRKE
PROFESSIONAL ENGINEER
LICENSE NO. 2014016927



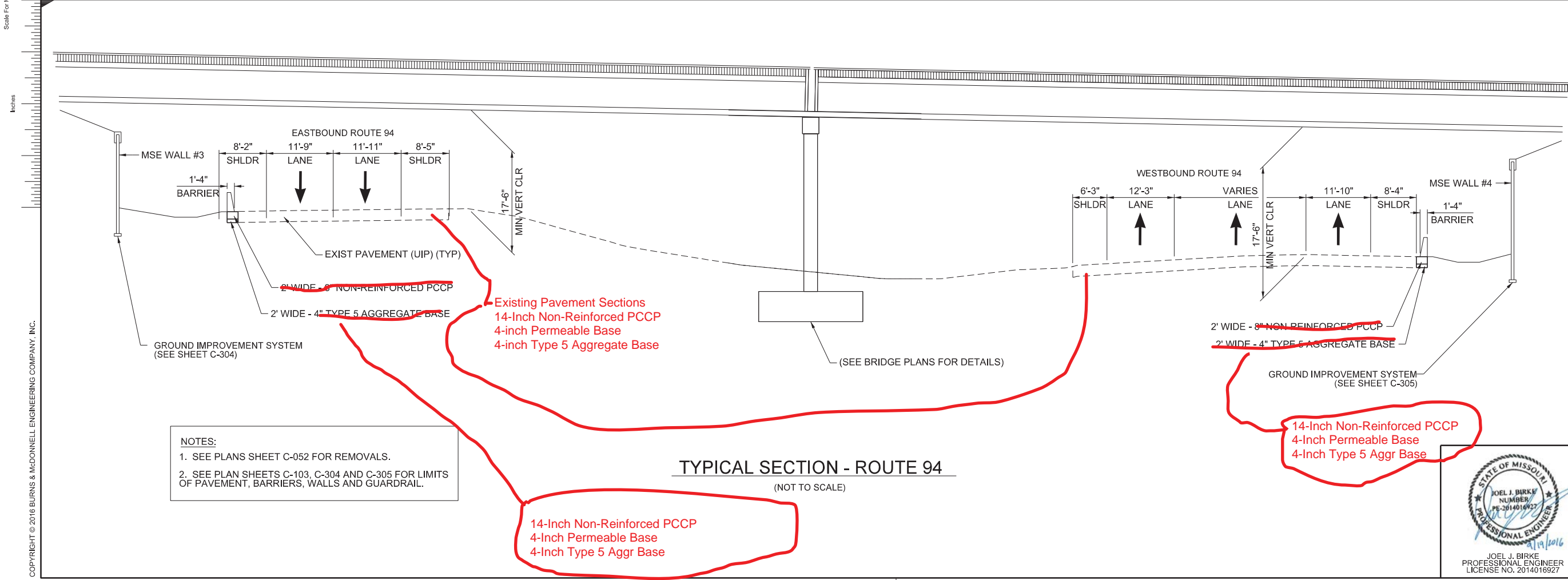
TYPICAL SECTION 11

(NOT TO SCALE)
STA 33+50.00 TO STA 35+50.33
STA 35+82.75 TO STA 44+03.30



TYPICAL SECTION 12

(NOT TO SCALE)
STA 0+05.00 TO STA 1+17.34
STA 1+63.98 TO STA 2+76.28



TYPICAL SECTION - ROUTE 94

(NOT TO SCALE)

- NOTES:
- 1. SEE PLANS SHEET C-052 FOR REMOVALS.
 - 2. SEE PLAN SHEETS C-103, C-304 AND C-305 FOR LIMITS OF PAVEMENT, BARRIERS, WALLS AND GUARDRAIL.

14-Inch Non-Reinforced PCCP
4-Inch Permeable Base
4-Inch Type 5 Aggr Base

14-Inch Non-Reinforced PCCP
4-Inch Permeable Base
4-Inch Type 5 Aggr Base

no.	date	by	chd	description
0	9/19/16	JB	DK	ISSUED FOR BID

FEDERAL ID NUMBER: TAP 9900 677

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND, THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATIONS OF ALL UNDERGROUND UTILITIES AS EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS, AND SHALL BE LOCATED PRIOR TO CONSTRUCTION.



**BURNS
MCDONNELL**

425 SOUTH WOODS MILL ROAD
CHESTERFIELD, MISSOURI 63017
314-682-1500
ENG. 000165

date September 2016	detailed J. Birke
designed J. Birke	checked D. Koscielski



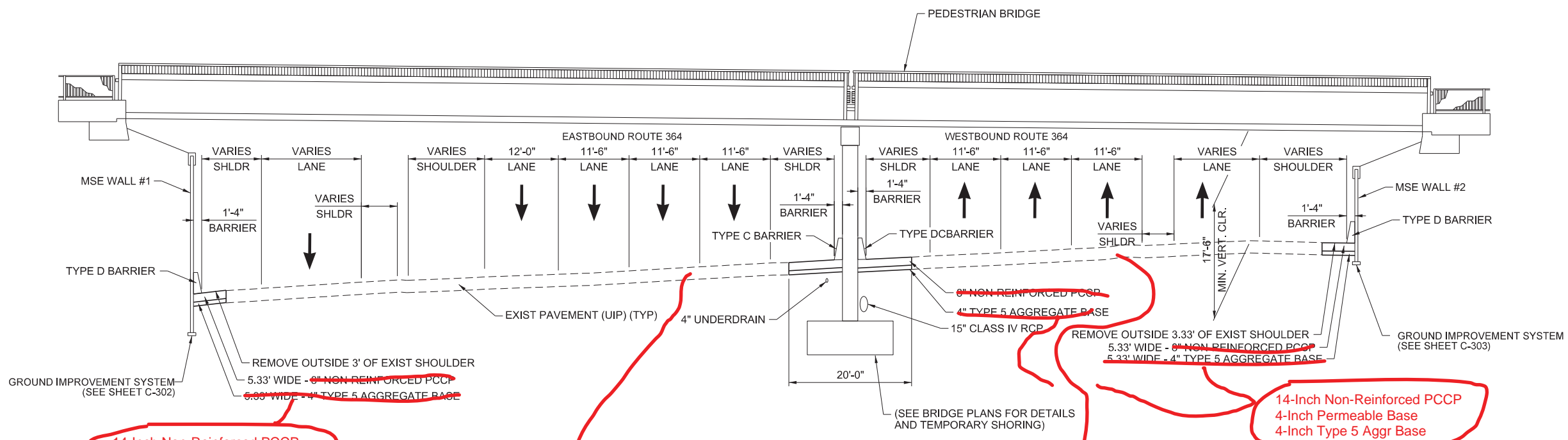
GREAT RIVERS GREENWAY
CENTENNIAL GREENWAY PHASE IIA

TYPICAL SECTIONS	
project 85395	contract
drawing C-005	rev. 0



file: Z:\C:\Users\TODD\OneDrive\85395\Centennial\Design\C420\Road_Shown\85395_C000_Typical Sections.dgn

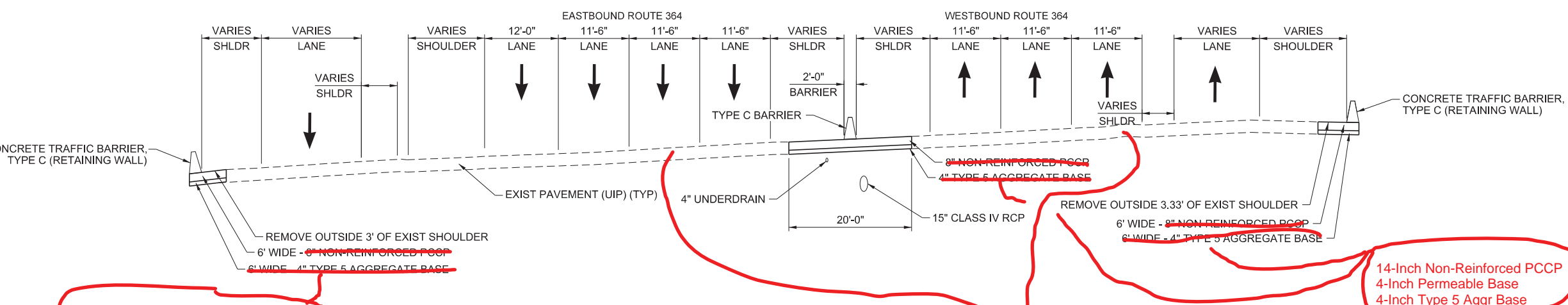
1 2 3 4 5 6 7 8 9 10 11



TYPICAL SECTION - ROUTE 364
(NOT TO SCALE)

NOTES:
1. SEE PLANS SHEET C-051 FOR REMOVALS.
2. SEE PLAN SHEETS C-101, C-302 AND C-303 FOR LIMITS OF PAVEMENT, BARRIERS, WALLS AND GUARDRAIL.

Existing Pavement Section:
14" Non-Reinforced PCCP
4" Permeable Base
4" Type 5 Aggregate Base



TYPICAL SECTION - ROUTE 364
(NOT TO SCALE)

Existing Pavement Section:
14" Non-Reinforced PCCP
4" Permeable Base
4" Type 5 Aggregate Base

14-Inch Non-Reinforced PCCP
4-Inch Permeable Base
4-Inch Type 5 Aggr Base

14-Inch Non-Reinforced PCCP
4-Inch Permeable Base
4-Inch Type 5 Aggr Base

no.	date	by	chd	description
0	9/19/16	JB	DK	ISSUED FOR BID

FEDERAL ID NUMBER: TAP 9900 677

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND, THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATIONS OF ALL UNDERGROUND UTILITIES AS EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS, AND SHALL BE LOCATED PRIOR TO CONSTRUCTION.



**BURNS
MCDONNELL**

425 SOUTH WOODS MILL ROAD
CHESTERFIELD, MISSOURI 63017
314-682-1500
ENG. 000165

date September 2016	detailed J. Birke
designed J. Birke	checked D. Koscielski



**GREAT RIVERS GREENWAY
CENTENNIAL GREENWAY PHASE IIA**

TYPICAL SECTIONS	
project 85395	contract
drawing C-006	rev. 0

file: Z:\C:\Users\Terry\OneDrive\85395_CentennialGreenway\Design\Road\Drawings\85395_C006_Typical Sections.dgn



COPYRIGHT © 2016 BURNS & MCDONNELL ENGINEERING COMPANY, INC.