Appendix C

Norfolk Southern Corporation Coordination

(This page intentionally left blank)

Brush College Road Improvement Study
Stakeholder Contact Log

Stakeholder	Contact Name(s)	Date	URS Staff Involved	Method	Comments
Norfolk Southern	Jim Kazmierczak	11/4/2010	Keith Benting	Meeting	Initial Stakeholder Meeting
			John Schwalbach		See meeting minutes.
			Randy Zilz		
			Rick Schroeder		
			Mary Cave - Decatur		
Norfolk Southern	Jim Wasilisian	1/21/2011	Keith Benting	Letter	Submitted track staging scheme for
	Senior Trainmaster				underpass and preliminary pier locations
					for overpass option.
Norfolk Southern	Jim Wasilisian	1/21/2011	Keith Benting	Email	Inquired about event recorder at NS track
	Senior Trainmaster				along north leg of Faries Parkway
					See email from L. Himstedt dated 1/21/11
					There is no recorder at the location.
Norfolk Southern	Jim Kazmierczak	2/16/2011	Keith Benting	Letter	Submitted track staging scheme for
	Engineer - Public				underpass and preliminary pier locations
	Improvements				for overpass option.
					Same as sent to J. Wasilisian on 1/22/11.
					See 3/1/11 ROC and 4/11/11 email.
Norfolk Southern	Lynn Himstedt	2/17/2011	Keith Benting	Email	Inquired about ownership of power lines
	C & S Supervisor				in NS Yard.
					See email response dated 2/17/11.
Norfolk Southern	Jim Kazmierczak	2/24/2011	Keith Benting	Email	Presented exhibits for underpass/overpass.
	Engineer - Public				Requested preference for either option.
	Improvements				See emails dated 4/11/11
Norfolk Southern	Jim Kazmierczak	3/1/2011	Keith Benting	Telephone	Checked status of NS reviews and
	Engineer - Public				discussed line of sight study results.
	Improvements				See ROC dated 3/1/2011
Norfolk Southern	Lynn Himstedt	3/1/2011	Keith Benting	Email	Sent Lynn results of Line of Sight Study.
	C & S Supervisor				Asked about options for signal relocation.
					See email response dated 3/4/11. Approved.
Norfolk Southern	Jim Kazmierczak	3/24/2011	Keith Benting	Email	Inquired about status of review of track
	Engineer - Public				staging for underpass option.
	Improvements				See emails dated 4/11/11

Stakeholder	Contact Name(s)	Date	URS Staff Involved	Method	Comments
Norfolk Southern	Jim Kazmierczak	4/11/2011	Keith Benting	Telephone	Inquired about status of review of track
	Engineer - Public				staging for underpass option.
	Improvements				See ROC & emails dated 4/11/11
Norfolk Southern	Jim Kazmierczak	4/18/2011	Keith Benting	Email	Inquired about insurance requirements for
	Engineer - Public				soil borings.
	Improvements				See email dated 4/20/11.
Norfolk Southern	Jim Kazmierczak	4/20/2011	Keith Benting	Email	Sent additional rendering of overpass option
	Engineer - Public				over NS yard.
	Improvements				
Norfolk Southern	Keith Keeton	6/23/2011	Keith Benting	Telephone	New contact instead of J Wasalisian.
	Asst. Terminal				Gave K. Keeton status of study.
	Supervisor				
Norfolk Southern	Jim Kazmierczak	5/25/2012	Keith Benting	Mail	Sent summary of proposed improvements
	Engineer - Public				and potential impacts to NS for review.
	Improvements				See comment letter dated 7/18/12.
Norfolk Southern	Jim Kazmierczak	7/12/2012	Keith Benting	Email	Asked about status of review of material
	Engineer - Public				submitted on 5/25/12.
	Improvements				See comment letter dated 7/18/12.
DMJM Harris	DMJM Harris	12/10/2012	Dan Skelley	Email	Emailed preliminary information to DMJM
(Norfolk Southern)	(Norfolk Southern)				Harris regarding proposed borings under NS
					yard for utilities.
					See email response dated 12/10/12
Norfolk Southern	Jim Kazmierczak	12/19/2012	Keith Benting	Email	Sent response to 7/17/12 review comments.
	Engineer - Public				Asked about windows to set girders over
	Improvements				yard tracks.
					See ROC with Ian Krispin dated 5-16-13.
Jacobs Engineering	Jim Szczupaj	4/5/2013	Keith Benting	Email	Followed up with Jim regarding 12/19/12
(Norfolk Southern)	(Daniel Parker)				submittal about setting girders over yard
					tracks.
					See ROC with Ian Krispin dated 5-16-13.
Norfolk Southern	Howard Swanson	5/15/2013	Keith Benting	Email	Followed up with Howard regarding 12/19/12
					submittal about setting girders over yard
					tracks.
					H. Swanson has been replaced by Ian Krispin.
					See 5-16-13 email from H. Swanson.

Stakeholder	Contact Name(s)	Date	URS Staff Involved	Method	Comments
Norfolk Southern	Ian Krispin	5/16/2013	Keith Benting	Phone	Ian Krispin called to discuss track outages
					in NS rail yard to set girders for overpass.
					See ROC dated 5-16-13.
Norfolk Southern	Ian Krispin	7/1/2013	Keith Benting	Email	Emailed Ian to ask if NS had any requirements
					for a BCR?
Norfolk Southern	Daniel Parker	9/18/2013	Keith Benting	Mail	TS&Ls for Overpass Structures; BCRs for
					existing structures; SGRs for Overpasses
Norfolk Southern	Larkin Bennett	3/14/2014	Keith Benting	Email	Asked about cost estimates for relocating
					overhead power lines and communications
					lines.
					Received confirmation email on 3/14/14, but
					no cost estimate. KWB sent additional
					information and offered to meet.
Jacobs Engineering	Jim Szczupaj	5/14/2014	Keith Benting	Telephone Call	Jim called to asked status of the project.
(Norfolk Southern)					I found out that NS did not send Jacobs the
					material sent via our 9/18/13 letter for review.
					Jim suggested that I email info to Daniel
					Parker at NS and cc him, but files are too
					large to email.
					See 5/14/14 emails to J Szczupaj. Sent
					larger files via secure folder at Jacobs website.
Norfolk Southern	Daniel Parker	5/14/2014	Keith Benting	Email	Sent email with TS&Ls approved by IDOT
	Ian Krispin				and TS&L for MSE Wall 005 for review.
Jacobs Engineering	Jim Szczupaj	6/26/2014	Keith Benting	Email	Notification that all railroad review comments
(Norfolk Southern)		6/27/2014			and approvals are subject to change if long
					gap in time before final design is undertaken
					or construction agreement is executed.

* See project file for emails and records of conversation (ROC)

URS

Meeting Minutes

Subject:	Brush College Road at NS Crossing Study: Preliminary Engineering
Project No:	36432772
Meeting Date & Time:	11/4/2010
Location:	URS - Decatur
Prepared By/Date:	Keith W. Benting/11-4-10

Attendees:		
	Keith Benting	URS - Project Manager
	Rick Schroeder	URS – Railroad Coordinator
	Randy Zilz	URS – Track Layout
	Matt Pope	URS – Structures
	John Schwalbach	URS – Office Manager
	Mary Cave	City of Decatur – Project Manager
	Laura Binz	Norfolk Southern – Terminal Supervisor
	James Kazmierczak	Norfolk Southern – Engineer, Public Improvements
	Jim Wasilisian	Norfolk Southern – Senior Trainmaster

Copies:	Attendees, Jim Meyer/URS, Tom Nord/URS, Project File

Purpose: Initial stakeholder meeting with Norfolk Southern. Gather information to determine the existing and future impacts of train movements at the Faries Parkway/Brush College Road intersection to vehicular traffic along the corridor and obtain information required to study both a roadway underpass and a roadway overpass option at the NS yard crossing Brush College Road.

Meeting Summary:

1) **Introductions (See Attendance Roster)**

2) **NS Crossing at north leg of Faries Parkway/Brush College Road Intersection**

   a. **Number of trains per day:** Typically 4 to 5 trains per day, but can increase during grain season. Trains typically block the crossing for 10 to 15 minutes. Switching operations. J. Wasilisian suggested that we assume 8 trains per day, anytime of day and that trains may block crossing for 20 minutes.

   b. **Time of train movements – same time of day or random?** During grain season, movements can occur anytime of day, all day long. One train movement (Bio-Chem) occurs after midnight.

   c. **Average length of trains:** Per J. Wasilisian, trains are 48 to 50 cars and individual car lengths vary. R. Schroeder suggested using an average car length of 60'.

   d. **Average speed of trains:** 10 mph

e. **Will future operations increase or decrease the number of trains or the time of movement? If so, can you provide a percent growth that we can use for our future year traffic analysis?** This depends on ADM operations. ADM is constructing another yard between CAT and Brush College Road along with an ethanol plant. L. Binz thought that train traffic at Faries Parkway might decrease, however J. Wisilisian thought that traffic might increase as a result of ADM operations.

f. **Are there any short-term, or long-term, development plans that would impact traffic within our study corridor?** This depends on ADM operations. ADM is constructing another yard between CAT and Brush College Road along with an ethanol plant.

3) NS Yard at Brush College Road - MP D372.9 – General Information

a. **Identify tracks – mainline, etc.:** L. Binz provided a track layout that was copied by URS. The tracks were also identified by L. Binz on an aerial photo and R. Zilz labeled the tracks on the aerial.

b. Confirmed 36 trains per day at 20 mph on Main track

c. Multiple movements on Yard tracks – virtually impossible to give accurate count. Per J. Wasilisian, this is the largest flat switching yard in North America. Every track on the bridge is used once an hour.

d. **Are there any changes planned to the existing yard at Brush College Road that might impact the layout of an underpass/overpass? (Additional tracks?)** J. Kazmierczak stated that nothing is planned at the present time, however NS reserves the right to add future tracks. Property ownership may restrict ability to add tracks beyond outside tracks. J. Kazmierczak also said that a line of sight study would be required for an overpass to make sure that the eastbound train engineer can see the cantilever signal that would be on the east side of the structure. The engineers' line of sight is typically 14.5' above the rail. There must be sufficient distance to brake the train after seeing the signal.

e. **Will future operations increase the number of trains? :** Yes. As the country moves to get more trucks off the road, there will be an increase in trains and also in double-stack units.

f. **Are any utilities located within the ballast or superstructure over Brush College Road?** Yes. According to J. Kazmierczak there are signal wires of all kinds. An air line also runs over the bridge and would need to be maintained. The signal department may mark the lines for our survey crew if they are not too busy, but they may only mark if actual digging will take place.

g. **Are inspection reports available for the existing structure?** J. Kazmierczak provided the latest inspection report. The report does not give any details of the condition, but only a rating of "Satisfactory", "Unsatisfactory", or "N/A" for the various bridge components.

4) NS Yard at Brush College Road – Underpass Option (Roadway Under NS Yard)

a. Can track alignments be shifted to allow stage construction of an underpass? Various track shifts were discussed. The heavier traffic is on the Westbound side with ADM. It was suggested by J. Wasilisian that if modifications at the east end of the yard were constructed, the Westbound yard tracks across Brush College Road could be temporarily taken out of service for construction of a new underpass. The modifications mentioned were tying the stub ended Eastbound Running Track into the Westbound Running Track and constructing approximately 1800' of double track where the main track currently bottlenecks down to a single main track. These modifications are currently in the design stage by NS. R. Schroeder suggested that we look for opportunities that would benefit NS and the City as we study the various options. Over the next month, R. Zilz will investigate options for shifting tracks in order to construct an underpass (highway under NS yard). We will meet with NS again to discuss after that study. J. Wasilisian said that he would try to get drawings of the proposed track improvements east of the bridge developed by NS.

b. Since the train speed is only 20 mph in the yard, the need for additional speed reductions for temporary alignments is not anticipated.

c. Discuss railing requirements on railroad structure over Brush College Road. : Per J. Kazmierczak, use NS Standards. Fence would be appropriate at this location.

d. Discuss potential impacts to signals, communications tower, power poles, building, service roads and parking/access. : K. Benting asked about the age of the yard office and asked if re-building would be an option if tracks needed to be placed in the area of the current building. J. Kazmierczak said that the building is not new but is in good shape. Relocating would be an option. In addition to the buried signal wires, there are heaters on switches. Our survey crew will need to pick-up the location of the heaters (propane tanks). The cantilever control point east of the bridge will remain where it is.

5) NS Yard at Brush College Road – Overpass Option (Roadway Over NS Yard)

a. Establish total width to be spanned with structure. : K. Benting stated that URS has determined that the center to center distance to the outside tracks is about 230'. Allowing 32' from the centerline of outside track to the centerline of bearing at the abutment would result in an overall structure length of 294'. The 32' allows for 25' from the centerline of the outer track to the face of the crashwall in front of an MSE wall at the abutment plus a distance of 7' from the face of the crashwall to the centerline of bearing. If a pier can be placed near the center of the yard, the length of each span would be about 147' for a 2-span structure. R. Schroeder pointed out that the 25' distance from centerline of outside track to the face of the crashwall would allow room for another track in the future.

b. Can pier(s) be placed in the yard between existing tracks? : J. Kazmierczak said that the center of the yard is probably the only place to locate a pier. It would be acceptable to place a pier near the center of the yard.

c. Verify required vertical clearance and horizontal clearances from centerline tracks to piers and abutments. : Horizontal clearance to the face of the pier or crashwall at the abutment should be 25'. The minimum required vertical clearance is 23'. J. Kazmierczak pointed out that the track surfacing operations may raise the track a couple of inches every five years or so. The minimum vertical clearance at the time of construction must be 23'. The last track surfacing was done in 2005. Since the track may undergo several surfacing operations before construction, URS may need to design for a clearance of 23'-6" relative to the existing track elevations. URS will have to look at the controlling track to set the low beam elevation.

d. **If MSE walls are used at abutments, will crashwalls be required in front of the MSE walls? :** Yes

e. Discuss access for construction. (From northeast quadrant?) : The contractor can access from the northeast however it will need to be a controlled access to construct the center pier. A safety fence will need to be specified and this will need to be considered when developing costs. There is no room in the NS yard to store material, so material may have to be stored on ADM property. James Street is a public road that can provide access to NS, however north of NS it is a private road for ADM.

f. Discuss potential impacts to signals, communications tower, power poles, building, service roads and parking/access. : Line of sight study will be required for the highway overpass option. Impacts to power poles, communications tower and yard office will be considered when evaluating pier location and clearance under superstructure.

g. For this option, would NS expect any rehabilitation or reconstruction of the portion of the structure carrying NS over the CN track? : There is value for NS to get rid of maintenance of the bridge, including the bridge over the CN track that services Tate & Lyle. K. Benting stated that maintaining the CN underpass will be a challenge for the highway overpass option. K. Benting stated that the problem is that the portion of the structure over the CN track is old and it may need to be replaced. Tate & Lyle wants to maintain access to CN so it is not likely that the CN track can be removed.

h. Can fill be placed at the existing underpass while maintaining the opening at the CN track?

- **Fill/compact to level where conventional methods can be used**
- **Use "flowable fill" for remainder (to bottom of existing superstructure)**
- **Consider retaining wall adjacent to CN track to retain fill at underpass**

J. Kazmierczak said that the method described would be considered as "retiring the structure in place". NS does not always like this method. Fill would be placed using conventional methods to a prescribed level and then flowable fill or grout would be place through holes in the

superstructure to fill the void. The existing superstructure would not be removed. J. Kazmierczak said that the method described would be acceptable. K. Benting asked if a T-Wall Retaining Wall System could be considered to retain the fill at the underpass so that it would not spill into the area at the CN underpass. J. Kazmierczak said the T-Wall option could be considered.

6) K. Benting asked J. Kasmierczak if NS had any soil boring information for any previous work in the yard near Brush College Road. J. Kazmierczak said that he would check, but he does not expect to find anything. He suggested that the driller get on the property while the flagger is already present for our surveyors. He said that the driller could get authorization to get on the property under our letter of agreement. K. Benting wasn't sure if he could get the subconsultant doing the drilling mobilized in time to do the work while the survey crew is in the area.

7) Regarding the survey, J. Kazmierczak said that due to issues with flaggers, it would be better if our crew did not survey more than 5 days in a row. K. Benting said that should not be a problem since there is plenty of work to do in other areas and the crew can interrupt the yard survey and then return. The crew may also consider working four 10-hours days per week, however that schedule would mean that the flaggers would get paid more for overtime.

8) J. Kazmierczak signed the letter of agreement and said that URS should contact J. Wasilisian to make arrangement for a flagger. J. Waslilisian said that we should give him 1 to 2 days notice for the flagger.

9) R. Zilz pointed out that the survey coverage will need to be extended to the east to pick up the track modifications being developed by NS.

These minutes represent our understanding of the discussion and decisions reached during the meeting. Please forward additions and/or corrections within five business days.

Sincerely,

Keith W. Benting, P.E., S.E.
Project Manager
keith_benting@urscorp.com

Attendance Roster

Date: 11/4/2010 **Location:** URS - Decatur

Purpose: Brush College Road/NS Crossing Study - Initial Stakeholder Meeting with Norfolk Southern

	Name	Organization	Title	Phone	Email
1	Keith Benting	URS	Project Manager	217-875-4808	keith_benting@urscorp.com
2	Rick Schroeder	URS	QA-QC	217-875-4800	Richard.Schroeder@URSCORP.com
3	Randy Zilz	URS	Track Layout	217-875-4800	Randel.Zilz@URSCORP.com
4	Matt Pope	URS	Structures	217-875-4800	matt_pope@urscorp.com
5	John Schwalbach	URS	OM	217 875-4800	John_Schwalbach@URSCORP.com
6	Mary Cave	City of Decatur	CEI	217-424-2747	mcave@decaturil.gov
7	Laura Binz	Norfolk Southern	Terminal Supv.	2176193817	Laura.Binz@Nscorp.com
8	JR Kazmierczak	Norfolk Southern	Engineer Public Improvement	404 529-1256	James.Kazmierczak @NScorp.com
9	Jim Wasilisian	Norfolk Southern	Senior Trainmaster	217-369-3877	James.Wasilisian@NScorp.com
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

URS

February 16, 2011

Norfolk Southern Corporation
1200 Peachtree St. NE
Atlanta, Georgia 30309

Attention: James R. Kazmierczak
Engineer Public Improvements

Re: **City of Decatur – Brush College Road Improvement Study**
Preliminary Schemes for Underpass and Overpass Options at NS Yard
File # BR0020452, Milepost D-372.9

Dear Mr. Kazmierczak:

Enclosed for your review and comment are two copies of the following:

(1) Preliminary Track Staging Scheme to Construct an Underpass at the NS Yard
(2) Preliminary Track Staging Scheme at the North Structure (If Required)
(3) Preliminary Cross Section – Underpass Option
(4) Preliminary Pier Layout for Overpass Option

From our initial meeting on November 4, 2010, it is our understanding that the tracks at the north structure can be taken out of service if the track work that is proposed east of the existing underpass is in place. If all tracks on the north structure can be taken out of service, the track staging scheme presented as Item (1) will apply. If all of the tracks on the north structure cannot be taken out of service at one time, Item (2) provides a scheme for staging the tracks to replace the north structure. It appears that the underpass option would require more than one construction season and likely require that Brush College Road be closed during construction. Item (3) shows a preliminary section of the underpass option.

Item (4) shows the proposed pier locations in the yard for the overpass option. The pier configuration will not be finalized until foundation requirements have been determined, so the final footprint of the piers has not been established at this time. The drawing provided shows a 5' pier width. The pier near the center of the yard may need to be moved further north if constructability becomes an issue. The girder splice locations over the yard will be determined as the preliminary design advances. We understand that a "line of sight" study needs to be performed for the signal located on the east side of the existing underpass.

URS Corporation
345 E. Ash Avenue
Suite B
Decatur, IL 62526
Tel: 217.875.4800
Fax: 217.875.3577

URS

The enclosure was submitted to Jim Wasilisian, Senior Trainmaster, on January 21, 2011.

Please contact me if you have any questions regarding this matter.

Sincerely,

URS Corporation

Keith W. Benting, P.E., S.E.
Project Manager

Enclosure

KWB/kwb
Enclosure
36432772.02000

cc: Mary Cave / City of Decatur (w/o Enclosure)

S:\36432772\Communications\letters\NS – Track Staging-1 2.16.11

(1)

City of Decatur

Brush College Road at Norfolk Southern Crossing Study

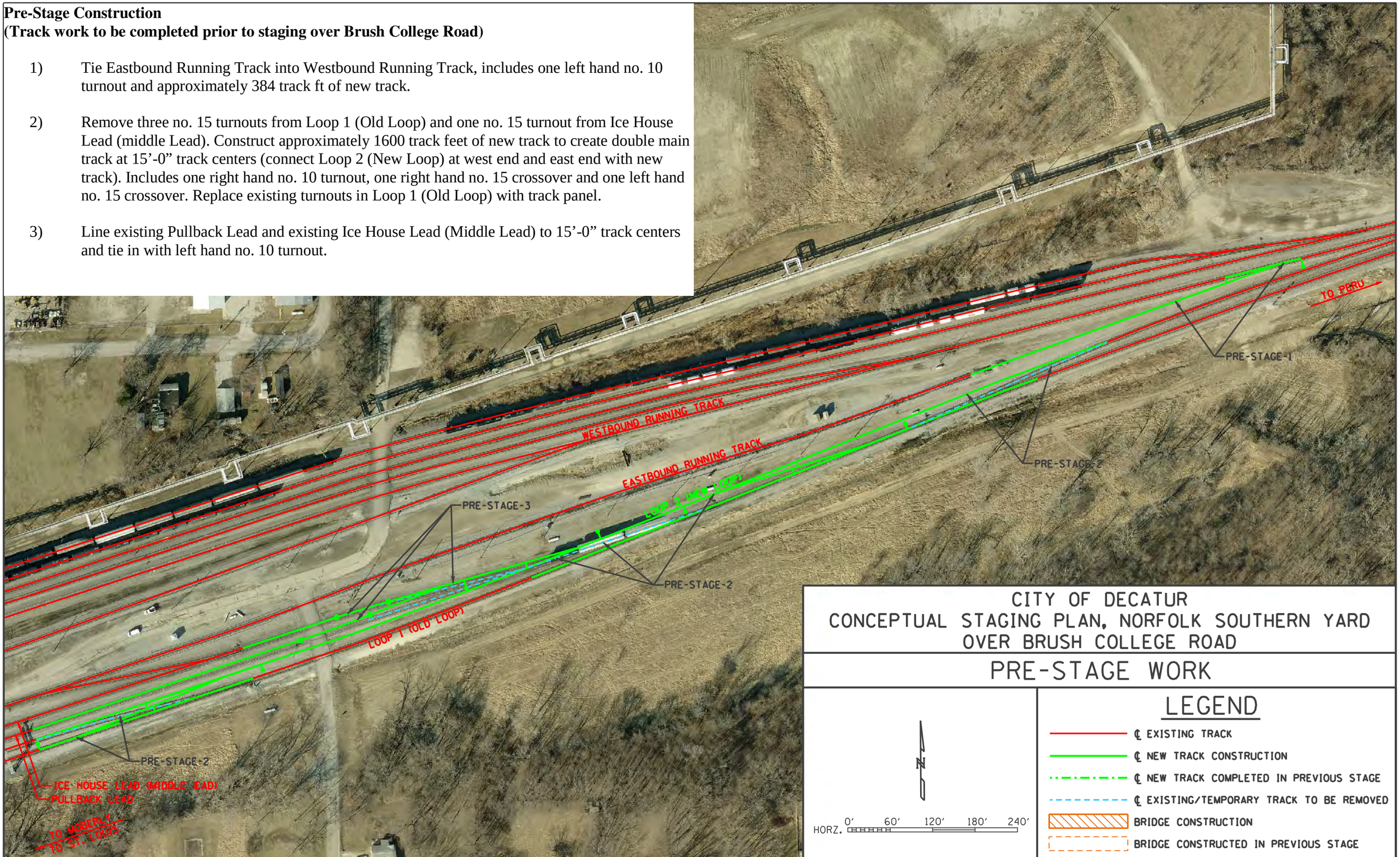
Preliminary Track Staging Scheme – Underpass Option

Pre-Stage Construction
(Track work to be completed prior to staging over Brush College Road)

1) Tie Eastbound Running Track into Westbound Running Track, includes one left hand no. 10 turnout and approximately 384 track ft of new track.

2) Remove three no. 15 turnouts from Loop 1 (Old Loop) and one no. 15 turnout from Ice House Lead (middle Lead). Construct approximately 1600 track feet of new track to create double main track at 15'-0" track centers (connect Loop 2 (New Loop) at west end and east end with new track). Includes one right hand no. 10 turnout, one right hand no. 15 crossover and one left hand no. 15 crossover. Replace existing turnouts in Loop 1 (Old Loop) with track panel.

3) Line existing Pullback Lead and existing Ice House Lead (Middle Lead) to 15'-0" track centers and tie in with left hand no. 10 turnout.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

PRE-STAGE WORK

HORZ. 0′ 60′ 120′ 180′ 240′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 0_Alt-2.dgn 1/21/2011 9:10:01 AM

Stage 1A

1) Construct south section of new structure, south of existing underpass, to carry relocated Loop 1 (Old Loop) and relocated Loop 2 (New Loop) over Brush College Road and necessary embankment/roadbed along relocated alignments to the west and to the east of new structure.

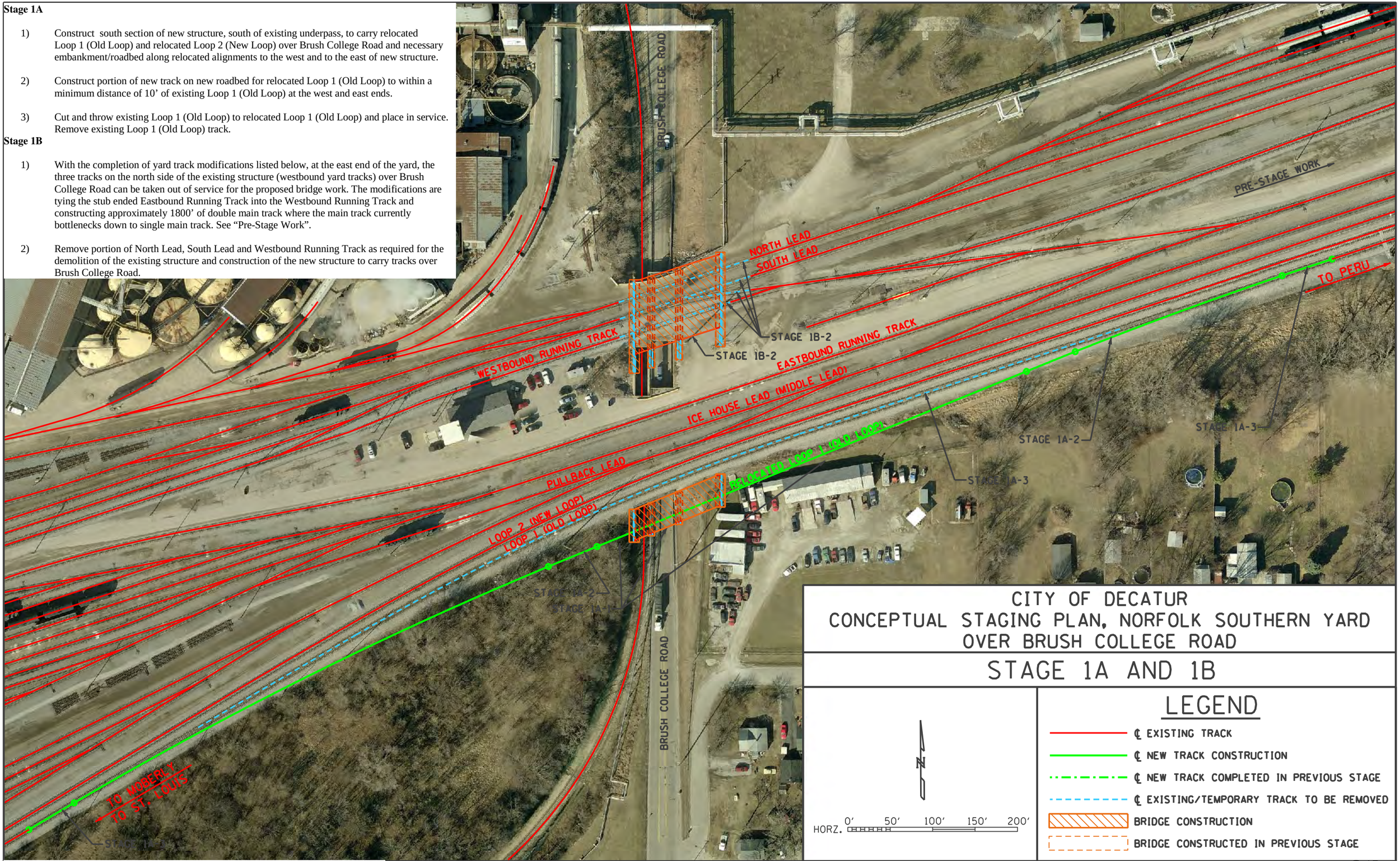
2) Construct portion of new track on new roadbed for relocated Loop 1 (Old Loop) to within a minimum distance of 10’ of existing Loop 1 (Old Loop) at the west and east ends.

3) Cut and throw existing Loop 1 (Old Loop) to relocated Loop 1 (Old Loop) and place in service. Remove existing Loop 1 (Old Loop) track.

Stage 1B

1) With the completion of yard track modifications listed below, at the east end of the yard, the three tracks on the north side of the existing structure (westbound yard tracks) over Brush College Road can be taken out of service for the proposed bridge work. The modifications are tying the stub ended Eastbound Running Track into the Westbound Running Track and constructing approximately 1800’ of double main track where the main track currently bottlenecks down to single main track. See “Pre-Stage Work”.

2) Remove portion of North Lead, South Lead and Westbound Running Track as required for the demolition of the existing structure and construction of the new structure to carry tracks over Brush College Road.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD OVER BRUSH COLLEGE ROAD

STAGE 1A AND 1B

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 1_Alt-2wBrdg.dgn 1/21/2011 8:44:52 AM

Stage 2A

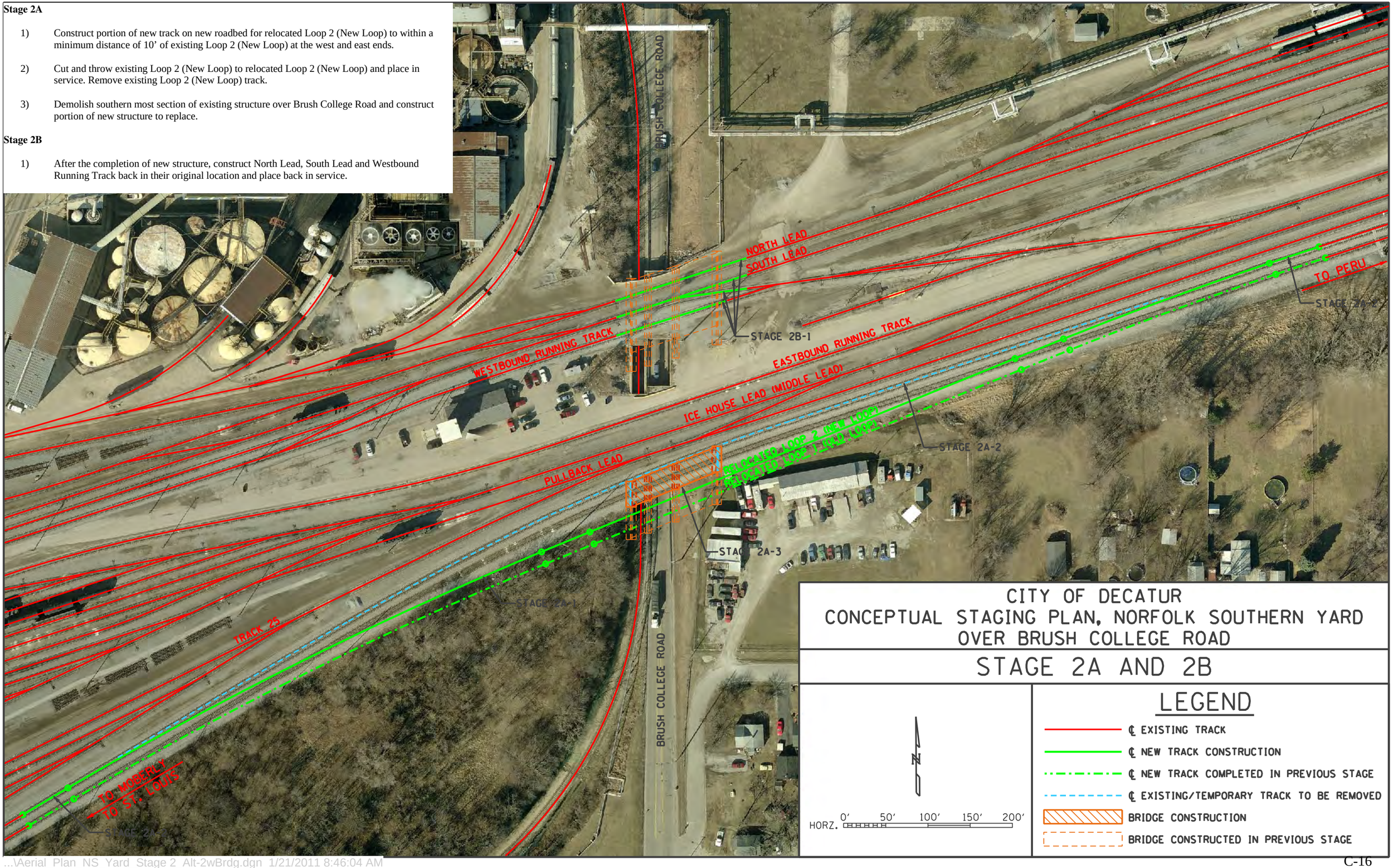
1) Construct portion of new track on new roadbed for relocated Loop 2 (New Loop) to within a minimum distance of 10’ of existing Loop 2 (New Loop) at the west and east ends.

2) Cut and throw existing Loop 2 (New Loop) to relocated Loop 2 (New Loop) and place in service. Remove existing Loop 2 (New Loop) track.

3) Demolish southern most section of existing structure over Brush College Road and construct portion of new structure to replace.

Stage 2B

1) After the completion of new structure, construct North Lead, South Lead and Westbound Running Track back in their original location and place back in service.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 2A AND 2B

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 2_Alt-2wBrdg.dgn 1/21/2011 8:46:04 AM

Stage 3

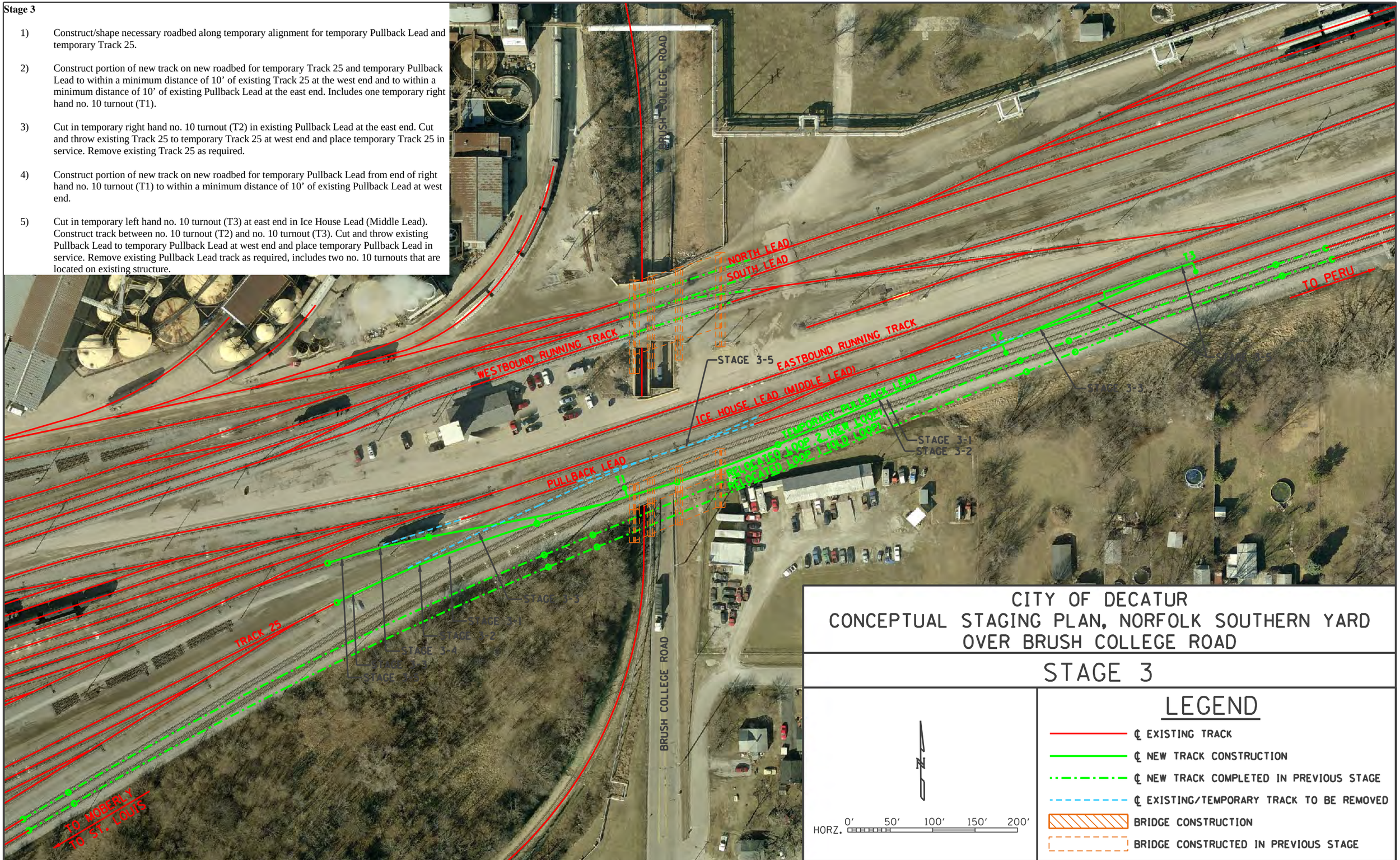
1) Construct/shape necessary roadbed along temporary alignment for temporary Pullback Lead and temporary Track 25.

2) Construct portion of new track on new roadbed for temporary Track 25 and temporary Pullback Lead to within a minimum distance of 10’ of existing Track 25 at the west end and to within a minimum distance of 10’ of existing Pullback Lead at the east end. Includes one temporary right hand no. 10 turnout (T1).

3) Cut in temporary right hand no. 10 turnout (T2) in existing Pullback Lead at the east end. Cut and throw existing Track 25 to temporary Track 25 at west end and place temporary Track 25 in service. Remove existing Track 25 as required.

4) Construct portion of new track on new roadbed for temporary Pullback Lead from end of right hand no. 10 turnout (T1) to within a minimum distance of 10’ of existing Pullback Lead at west end.

5) Cut in temporary left hand no. 10 turnout (T3) at east end in Ice House Lead (Middle Lead). Construct track between no. 10 turnout (T2) and no. 10 turnout (T3). Cut and throw existing Pullback Lead to temporary Pullback Lead at west end and place temporary Pullback Lead in service. Remove existing Pullback Lead track as required, includes two no. 10 turnouts that are located on existing structure.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD OVER BRUSH COLLEGE ROAD

STAGE 3

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

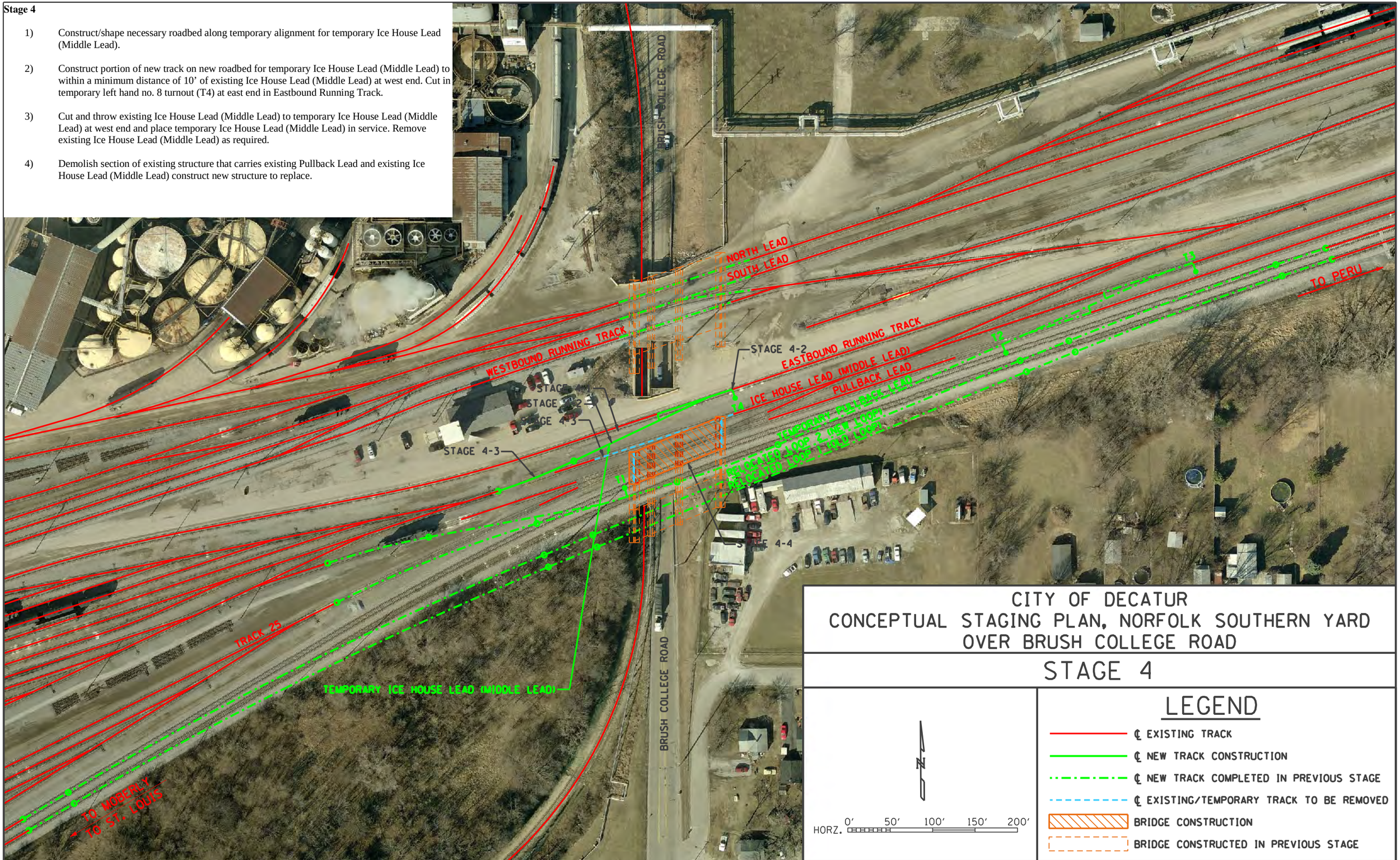
Stage 4

1) Construct/shape necessary roadbed along temporary alignment for temporary Ice House Lead (Middle Lead).

2) Construct portion of new track on new roadbed for temporary Ice House Lead (Middle Lead) to within a minimum distance of 10' of existing Ice House Lead (Middle Lead) at west end. Cut in temporary left hand no. 8 turnout (T4) at east end in Eastbound Running Track.

3) Cut and throw existing Ice House Lead (Middle Lead) to temporary Ice House Lead (Middle Lead) at west end and place temporary Ice House Lead (Middle Lead) in service. Remove existing Ice House Lead (Middle Lead) as required.

4) Demolish section of existing structure that carries existing Pullback Lead and existing Ice House Lead (Middle Lead) construct new structure to replace.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 4

HORZ. 0' 50' 100' 150' 200'

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 4_Alt-2wBrdg.dgn 1/21/2011 8:50:27 AM

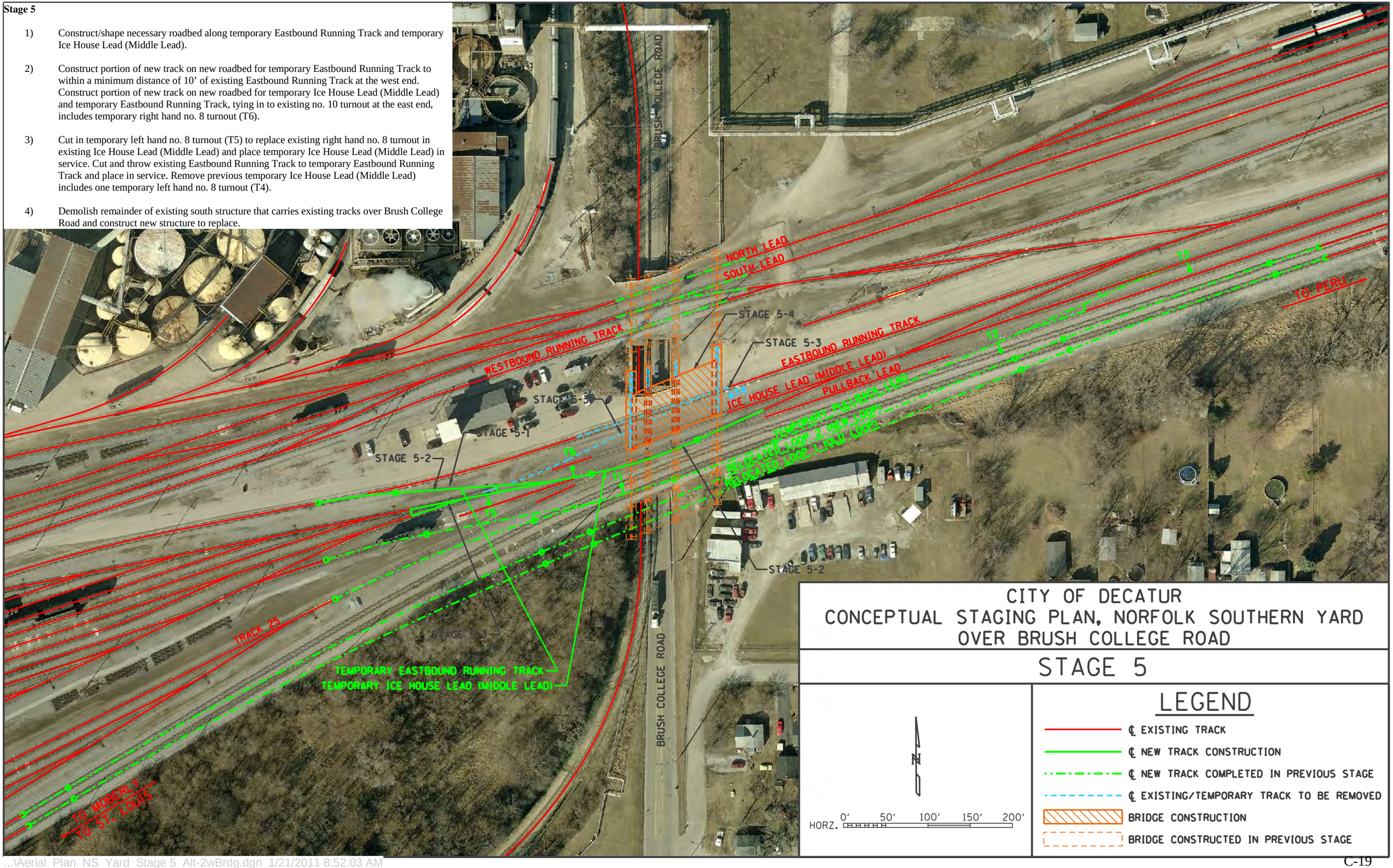
Stage 5

1) Construct/shape necessary roadbed along temporary Eastbound Running Track and temporary Ice House Lead (Middle Lead).

2) Construct portion of new track on new roadbed for temporary Eastbound Running Track to within a minimum distance of 10’ of existing Eastbound Running Track at the west end. Construct portion of new track on new roadbed for temporary Ice House Lead (Middle Lead) and temporary Eastbound Running Track, tying in to existing no. 10 turnout at the east end, includes temporary right hand no. 8 turnout (T6).

3) Cut in temporary left hand no. 8 turnout (T5) to replace existing right hand no. 8 turnout in existing Ice House Lead (Middle Lead) and place temporary Ice House Lead (Middle Lead) in service. Cut and throw existing Eastbound Running Track to temporary Eastbound Running Track and place in service. Remove previous temporary Ice House Lead (Middle Lead) includes one temporary left hand no. 8 turnout (T4).

4) Demolish remainder of existing south structure that carries existing tracks over Brush College Road and construct new structure to replace.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD OVER BRUSH COLLEGE ROAD

STAGE 5

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 5_Alt-2wBrdg.dgn 1/21/2011 8:52:03 AM

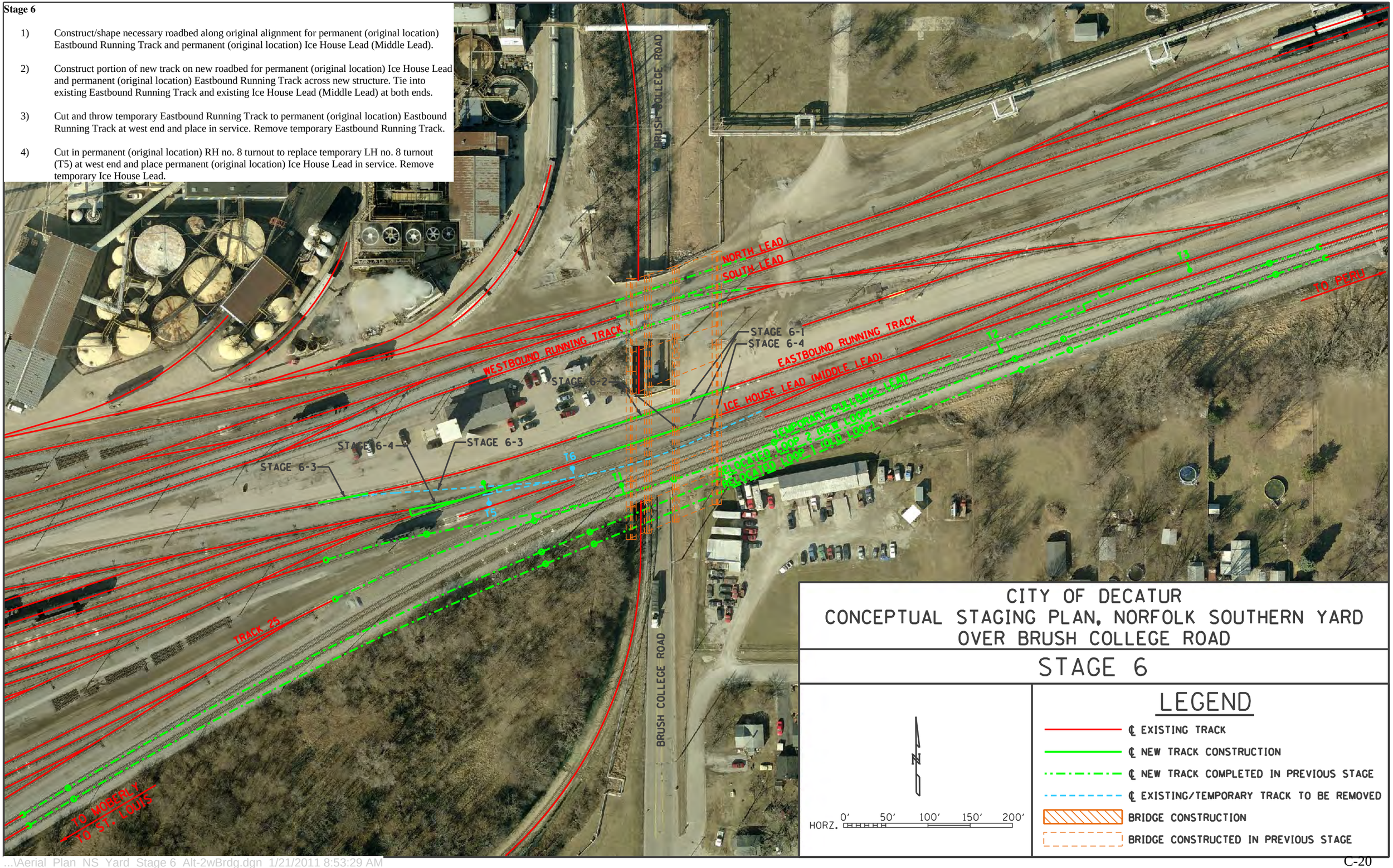
Stage 6

1) Construct/shape necessary roadbed along original alignment for permanent (original location) Eastbound Running Track and permanent (original location) Ice House Lead (Middle Lead).

2) Construct portion of new track on new roadbed for permanent (original location) Ice House Lead and permanent (original location) Eastbound Running Track across new structure. Tie into existing Eastbound Running Track and existing Ice House Lead (Middle Lead) at both ends.

3) Cut and throw temporary Eastbound Running Track to permanent (original location) Eastbound Running Track at west end and place in service. Remove temporary Eastbound Running Track.

4) Cut in permanent (original location) RH no. 8 turnout to replace temporary LH no. 8 turnout (T5) at west end and place permanent (original location) Ice House Lead in service. Remove temporary Ice House Lead.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 6

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 6_Alt-2wBrdg.dgn 1/21/2011 8:53:29 AM

Stage 7

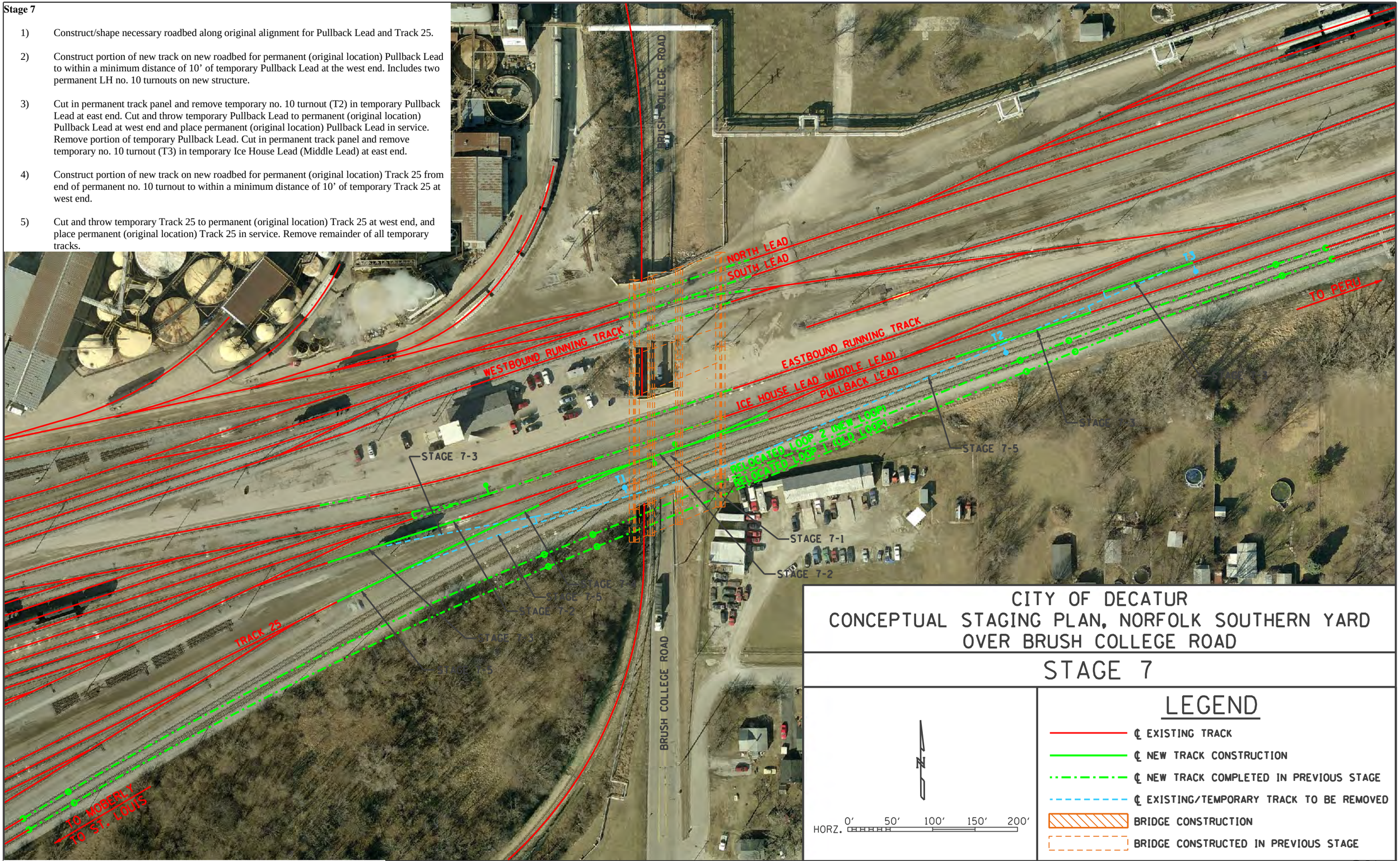
1) Construct/shape necessary roadbed along original alignment for Pullback Lead and Track 25.

2) Construct portion of new track on new roadbed for permanent (original location) Pullback Lead to within a minimum distance of 10’ of temporary Pullback Lead at the west end. Includes two permanent LH no. 10 turnouts on new structure.

3) Cut in permanent track panel and remove temporary no. 10 turnout (T2) in temporary Pullback Lead at east end. Cut and throw temporary Pullback Lead to permanent (original location) Pullback Lead at west end and place permanent (original location) Pullback Lead in service. Remove portion of temporary Pullback Lead. Cut in permanent track panel and remove temporary no. 10 turnout (T3) in temporary Ice House Lead (Middle Lead) at east end.

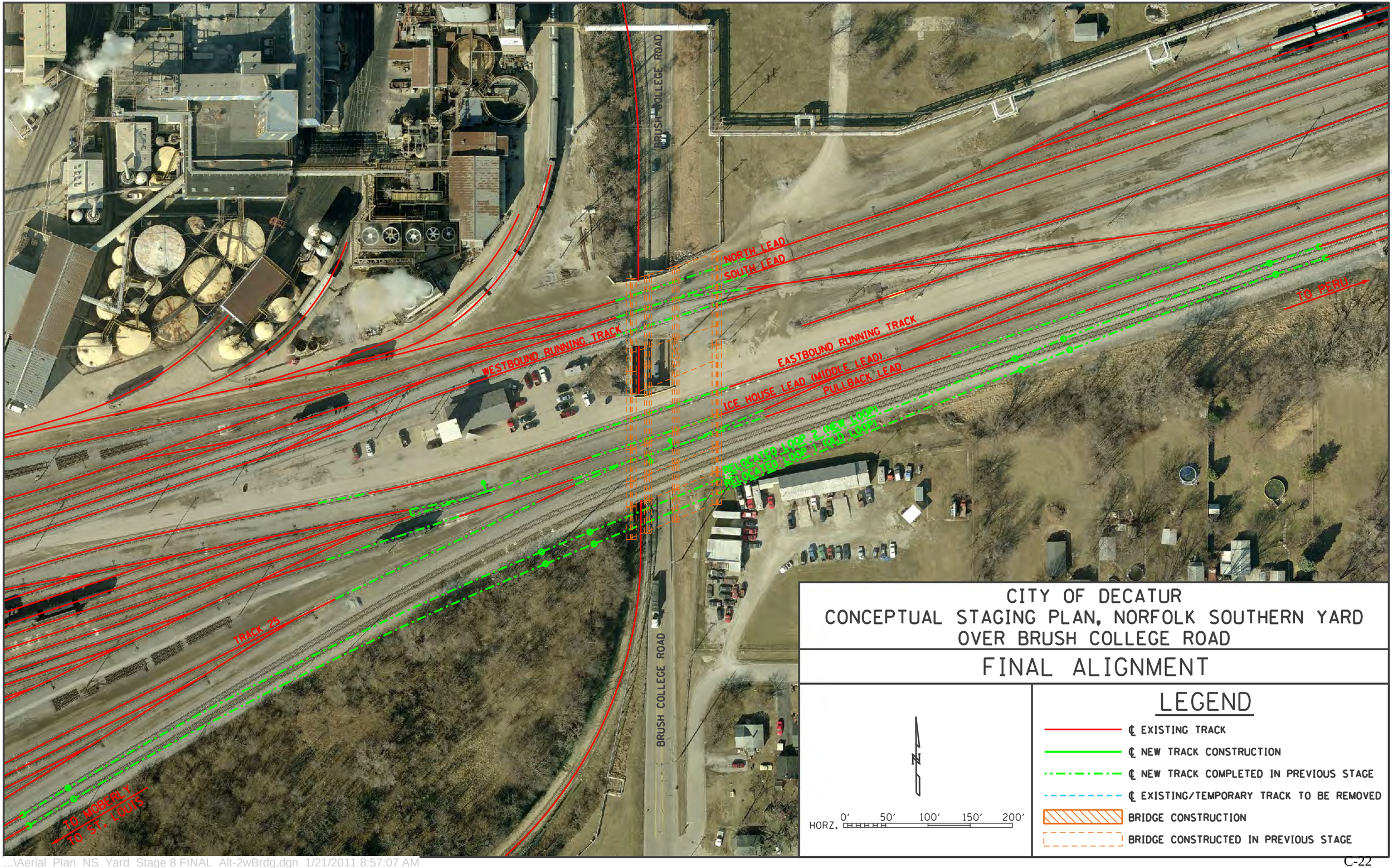
4) Construct portion of new track on new roadbed for permanent (original location) Track 25 from end of permanent no. 10 turnout to within a minimum distance of 10’ of temporary Track 25 at west end.

5) Cut and throw temporary Track 25 to permanent (original location) Track 25 at west end, and place permanent (original location) Track 25 in service. Remove remainder of all temporary tracks.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 7



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD OVER BRUSH COLLEGE ROAD

FINAL ALIGNMENT

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 8 FINAL_Alt-2wBrdg.dgn 1/21/2011 8:57:07 AM

(2)

City of Decatur

Brush College Road at Norfolk Southern Crossing Study

Track Staging Scheme at North Structure (If Required)

Stage 1

1) Construct south section of new structure, south of existing underpass, to carry temporary Westbound Running Track over Brush College Road.

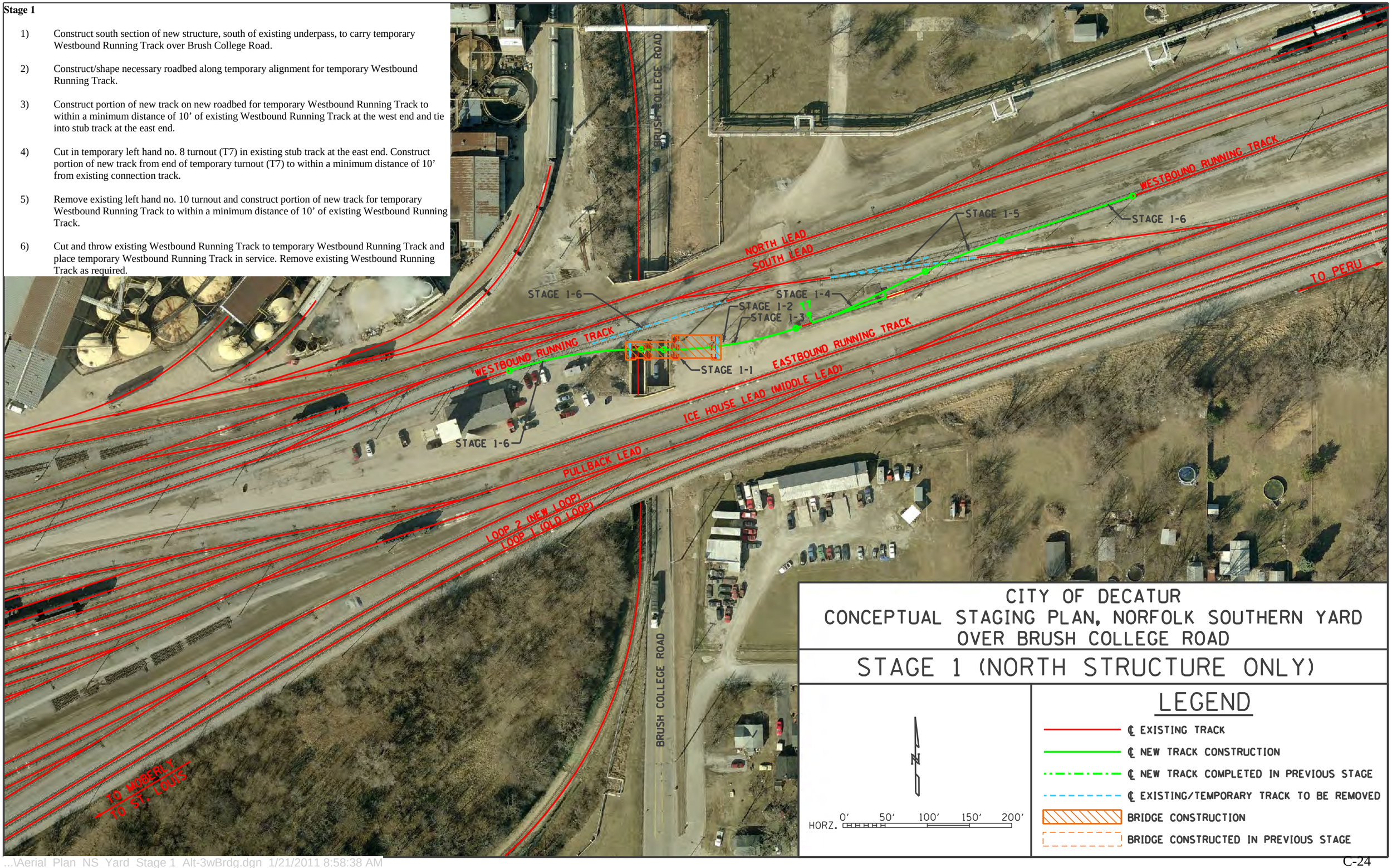
2) Construct/shape necessary roadbed along temporary alignment for temporary Westbound Running Track.

3) Construct portion of new track on new roadbed for temporary Westbound Running Track to within a minimum distance of 10’ of existing Westbound Running Track at the west end and tie into stub track at the east end.

4) Cut in temporary left hand no. 8 turnout (T7) in existing stub track at the east end. Construct portion of new track from end of temporary turnout (T7) to within a minimum distance of 10’ from existing connection track.

5) Remove existing left hand no. 10 turnout and construct portion of new track for temporary Westbound Running Track to within a minimum distance of 10’ of existing Westbound Running Track.

6) Cut and throw existing Westbound Running Track to temporary Westbound Running Track and place temporary Westbound Running Track in service. Remove existing Westbound Running Track as required.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 1 (NORTH STRUCTURE ONLY)

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 1_Alt-3wBrdg.dgn 1/21/2011 8:58:38 AM

Stage 2

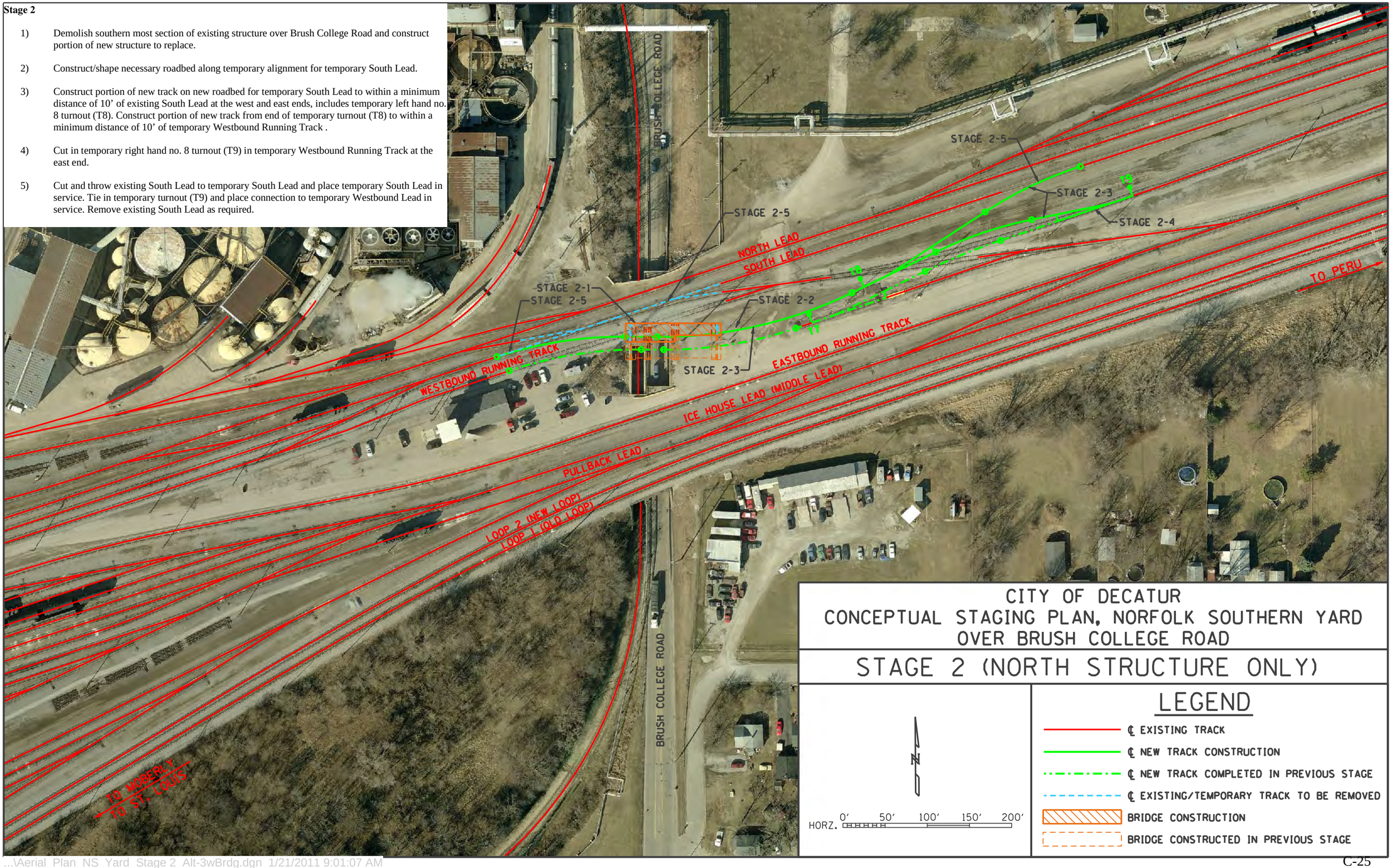
1) Demolish southern most section of existing structure over Brush College Road and construct portion of new structure to replace.

2) Construct/shape necessary roadbed along temporary alignment for temporary South Lead.

3) Construct portion of new track on new roadbed for temporary South Lead to within a minimum distance of 10’ of existing South Lead at the west and east ends, includes temporary left hand no. 8 turnout (T8). Construct portion of new track from end of temporary turnout (T8) to within a minimum distance of 10’ of temporary Westbound Running Track .

4) Cut in temporary right hand no. 8 turnout (T9) in temporary Westbound Running Track at the east end.

5) Cut and throw existing South Lead to temporary South Lead and place temporary South Lead in service. Tie in temporary turnout (T9) and place connection to temporary Westbound Lead in service. Remove existing South Lead as required.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 2 (NORTH STRUCTURE ONLY)

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 2_Alt-3wBrdg.dgn 1/21/2011 9:01:07 AM

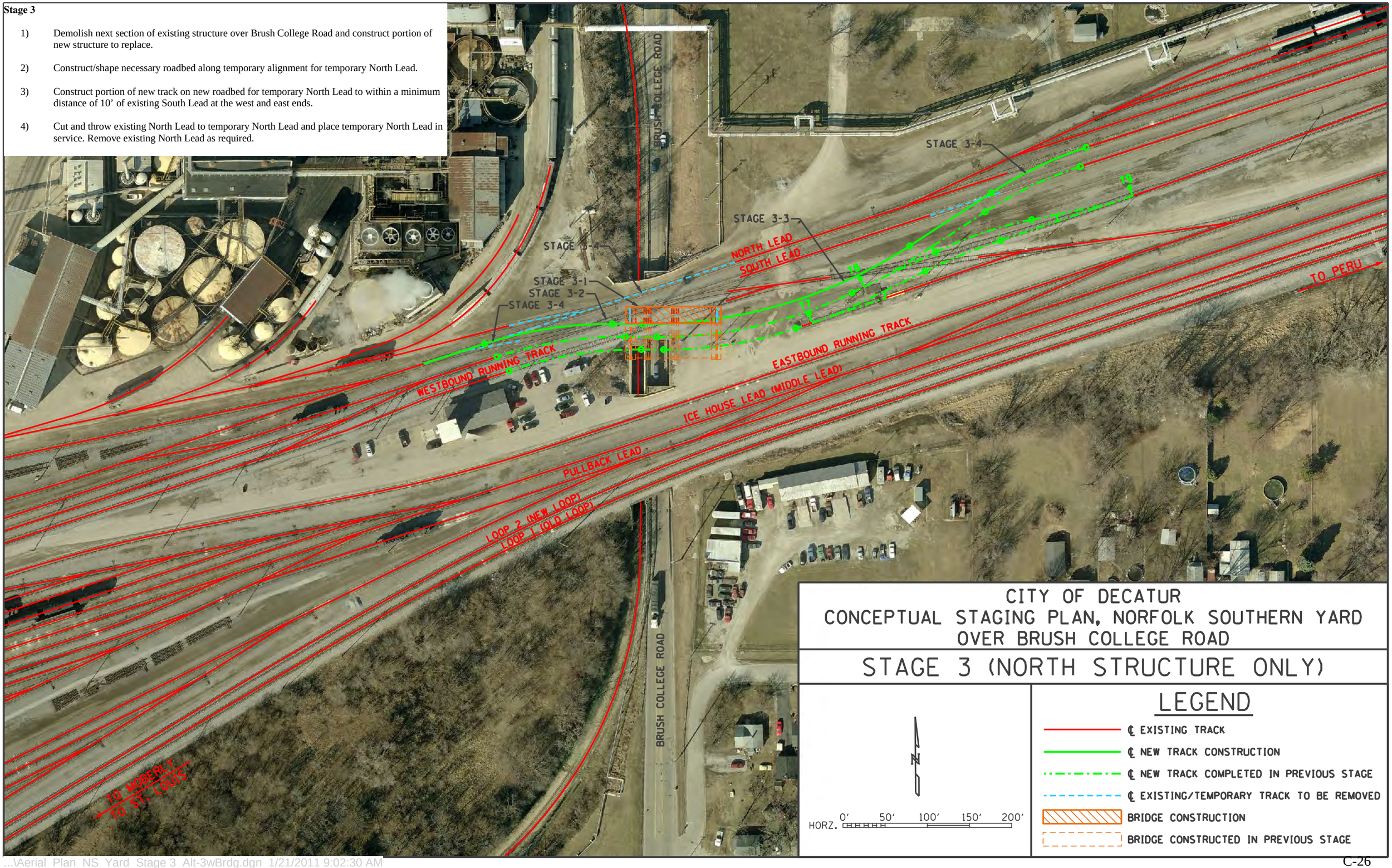
Stage 3

1) Demolish next section of existing structure over Brush College Road and construct portion of new structure to replace.

2) Construct/shape necessary roadbed along temporary alignment for temporary North Lead.

3) Construct portion of new track on new roadbed for temporary North Lead to within a minimum distance of 10’ of existing South Lead at the west and east ends.

4) Cut and throw existing North Lead to temporary North Lead and place temporary North Lead in service. Remove existing North Lead as required.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 3 (NORTH STRUCTURE ONLY)

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 3_Alt-3wBrdg.dgn 1/21/2011 9:02:30 AM

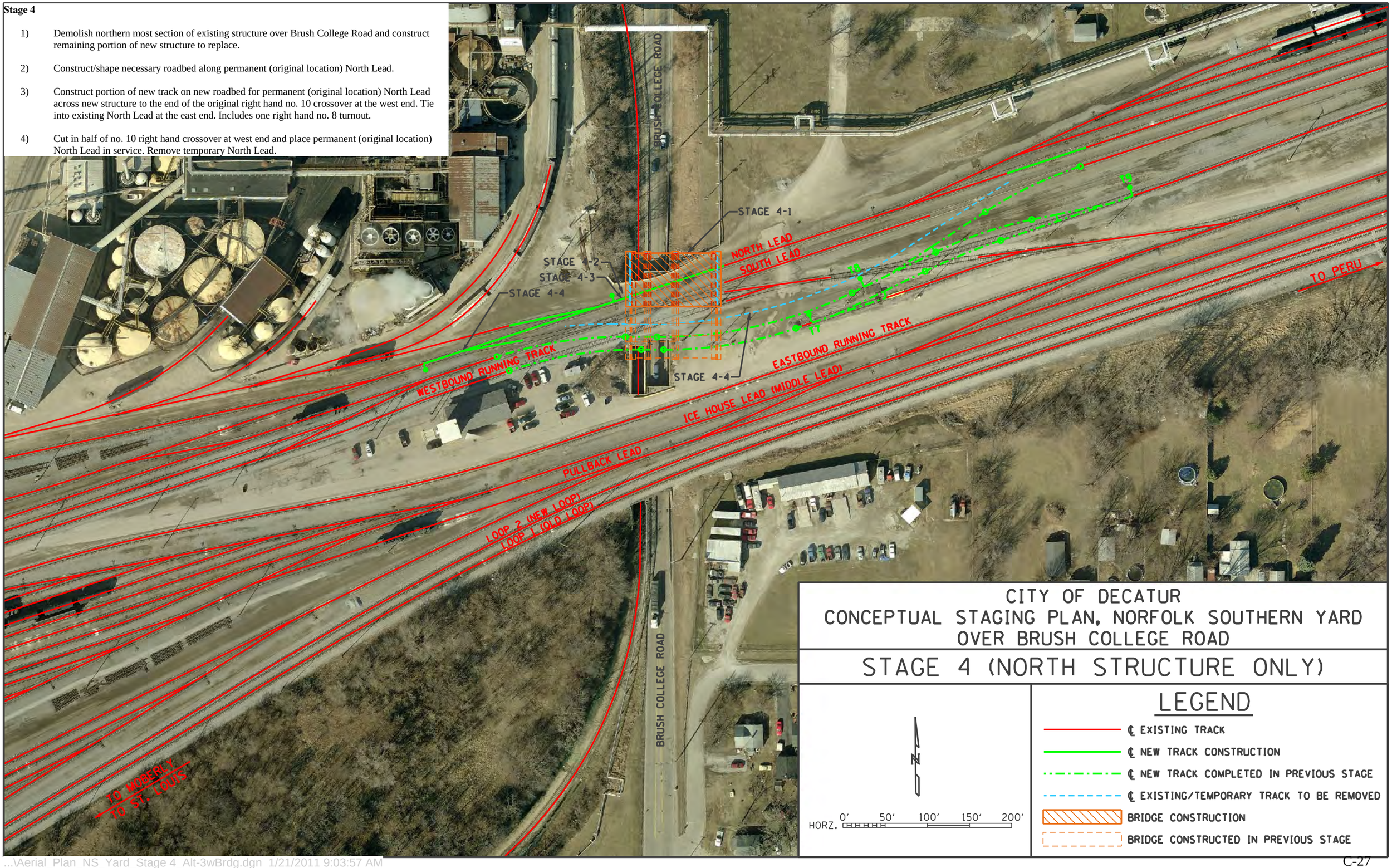
Stage 4

1) Demolish northern most section of existing structure over Brush College Road and construct remaining portion of new structure to replace.

2) Construct/shape necessary roadbed along permanent (original location) North Lead.

3) Construct portion of new track on new roadbed for permanent (original location) North Lead across new structure to the end of the original right hand no. 10 crossover at the west end. Tie into existing North Lead at the east end. Includes one right hand no. 8 turnout.

4) Cut in half of no. 10 right hand crossover at west end and place permanent (original location) North Lead in service. Remove temporary North Lead.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 4 (NORTH STRUCTURE ONLY)

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

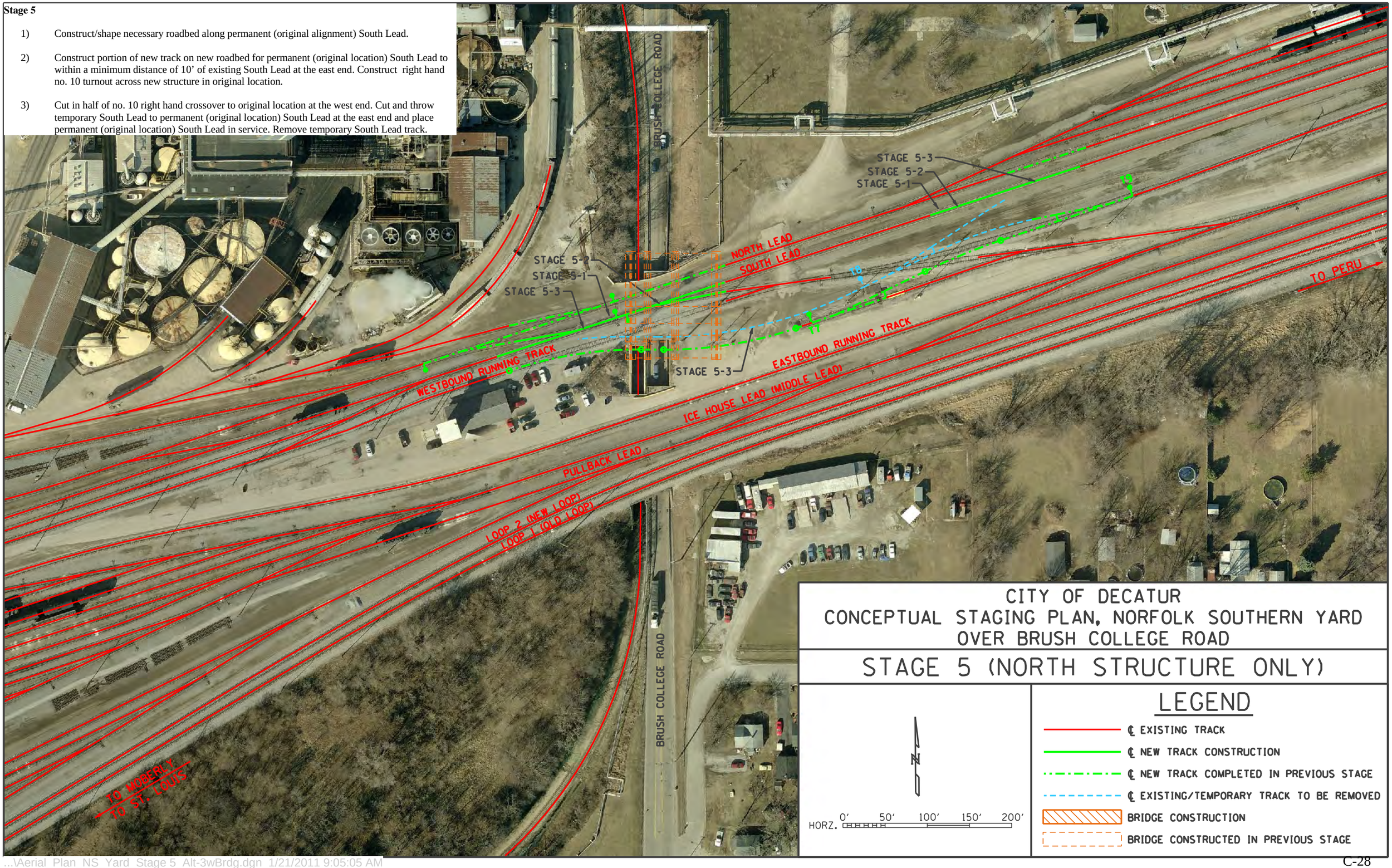
...\Aerial_Plan_NS_Yard_Stage 4_Alt-3wBrdg.dgn 1/21/2011 9:03:57 AM

Stage 5

1) Construct/shape necessary roadbed along permanent (original alignment) South Lead.

2) Construct portion of new track on new roadbed for permanent (original location) South Lead to within a minimum distance of 10' of existing South Lead at the east end. Construct right hand no. 10 turnout across new structure in original location.

3) Cut in half of no. 10 right hand crossover to original location at the west end. Cut and throw temporary South Lead to permanent (original location) South Lead at the east end and place permanent (original location) South Lead in service. Remove temporary South Lead track.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

STAGE 5 (NORTH STRUCTURE ONLY)

HORZ. 0' 50' 100' 150' 200'

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 5_Alt-3wBrdg.dgn 1/21/2011 9:05:05 AM

Stage 6

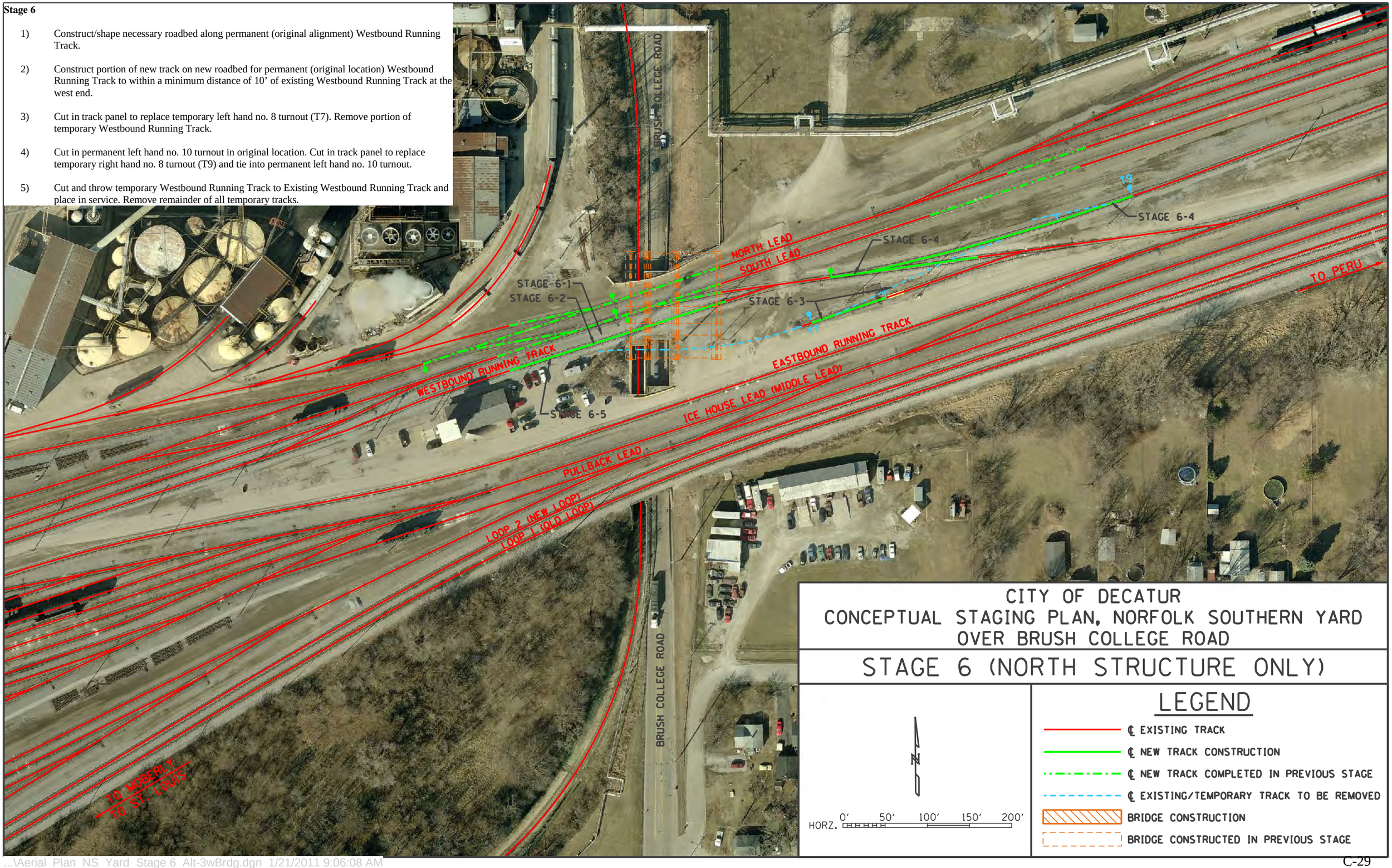
1) Construct/shape necessary roadbed along permanent (original alignment) Westbound Running Track.

2) Construct portion of new track on new roadbed for permanent (original location) Westbound Running Track to within a minimum distance of 10’ of existing Westbound Running Track at the west end.

3) Cut in track panel to replace temporary left hand no. 8 turnout (T7). Remove portion of temporary Westbound Running Track.

4) Cut in permanent left hand no. 10 turnout in original location. Cut in track panel to replace temporary right hand no. 8 turnout (T9) and tie into permanent left hand no. 10 turnout.

5) Cut and throw temporary Westbound Running Track to Existing Westbound Running Track and place in service. Remove remainder of all temporary tracks.



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD
OVER BRUSH COLLEGE ROAD

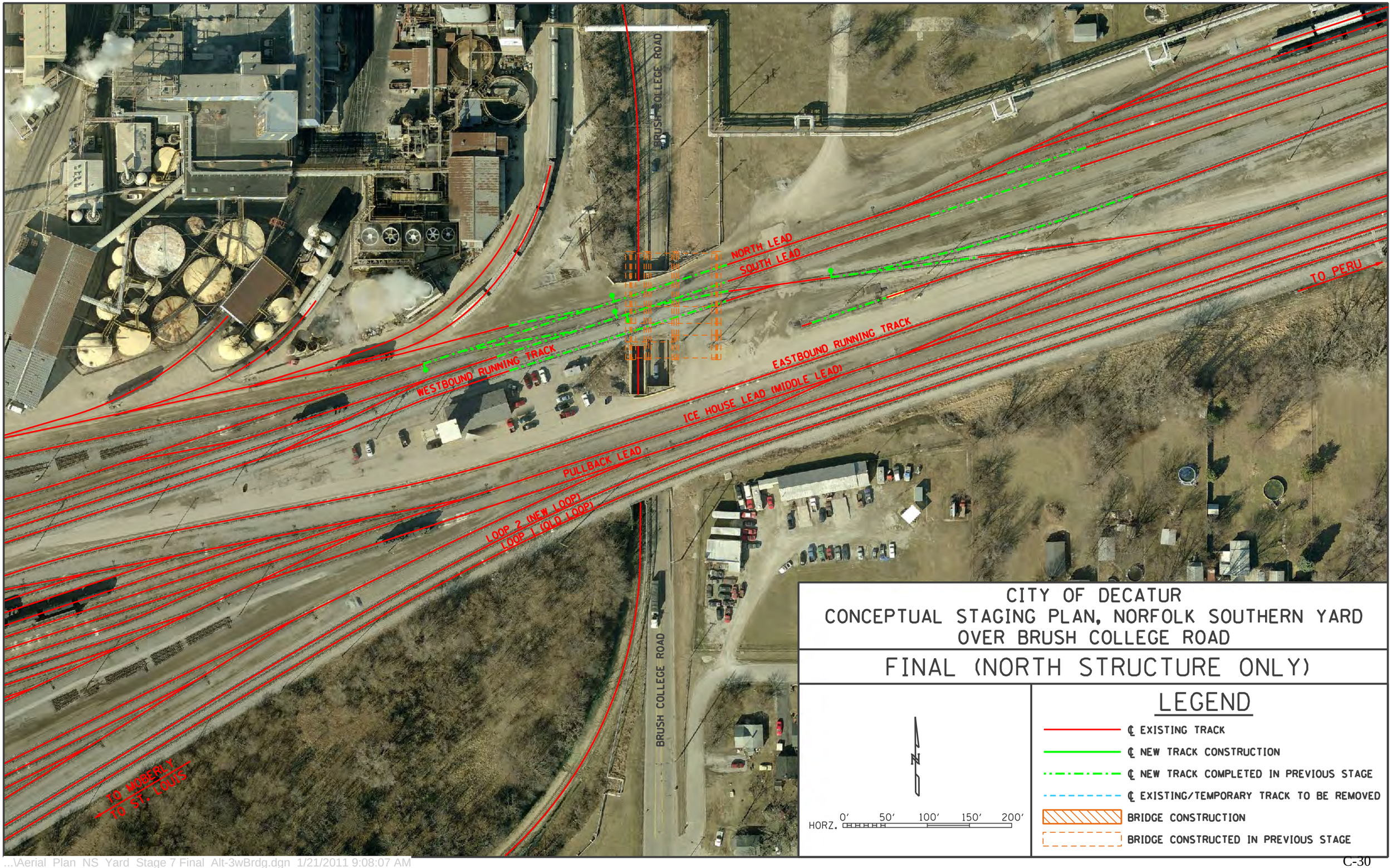
STAGE 6 (NORTH STRUCTURE ONLY)

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

...\Aerial_Plan_NS_Yard_Stage 6_Alt-3wBrdg.dgn 1/21/2011 9:06:08 AM



CITY OF DECATUR
CONCEPTUAL STAGING PLAN, NORFOLK SOUTHERN YARD OVER BRUSH COLLEGE ROAD

FINAL (NORTH STRUCTURE ONLY)

HORZ. 0′ 50′ 100′ 150′ 200′

LEGEND

- ℄ EXISTING TRACK
- ℄ NEW TRACK CONSTRUCTION
- ℄ NEW TRACK COMPLETED IN PREVIOUS STAGE
- ℄ EXISTING/TEMPORARY TRACK TO BE REMOVED
- BRIDGE CONSTRUCTION
- BRIDGE CONSTRUCTED IN PREVIOUS STAGE

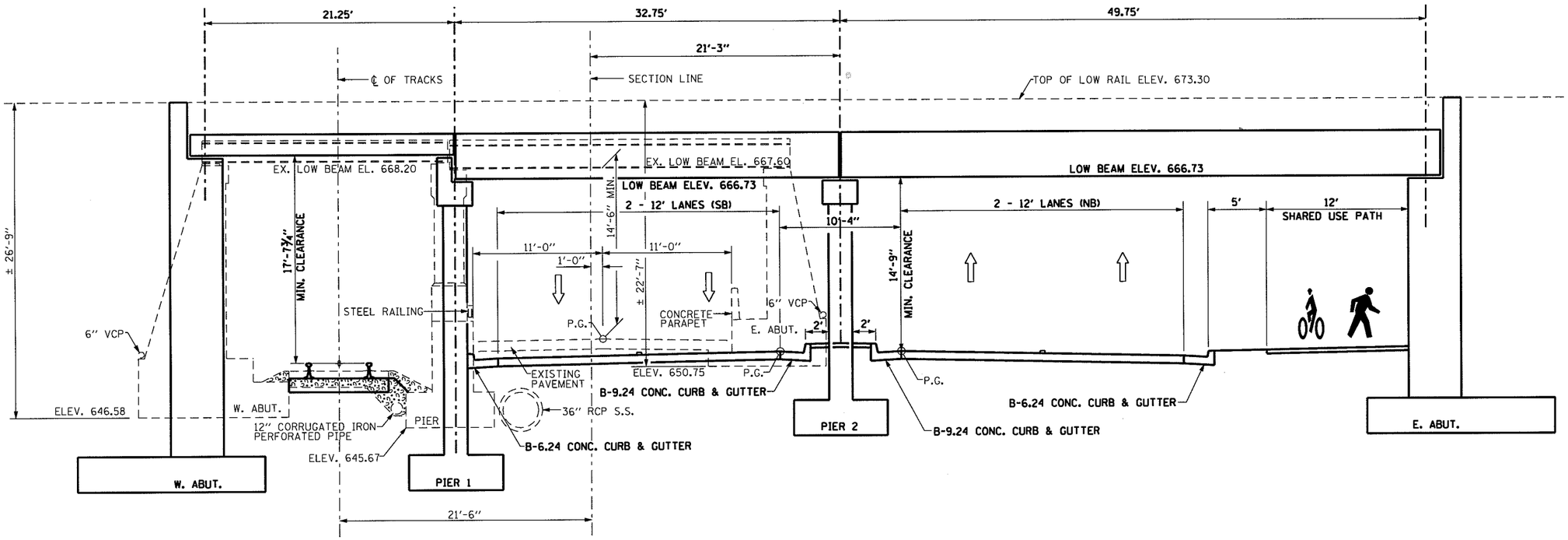
...\Aerial_Plan_NS_Yard_Stage 7 Final_Alt-3wBrdg.dgn 1/21/2011 9:08:07 AM

(3)

City of Decatur

Brush College Road at Norfolk Southern Crossing Study

Preliminary Cross Section – Underpass Option



BRUSH COLLEGE ROAD - LOOKING NORTH @ STRUCTURE

(UNDERPASS OPTION)

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRUSH COLLEGE ROAD TYPICAL SECTION AT STRUCTURE	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - SRS	REVISED -							
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -					CONTRACT NO.		
...\Proposed Typical Sections.dgn 1/21/2011 10:34:13 AM		DATE -	REVISED -		SCALE: 1"=10' SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT		

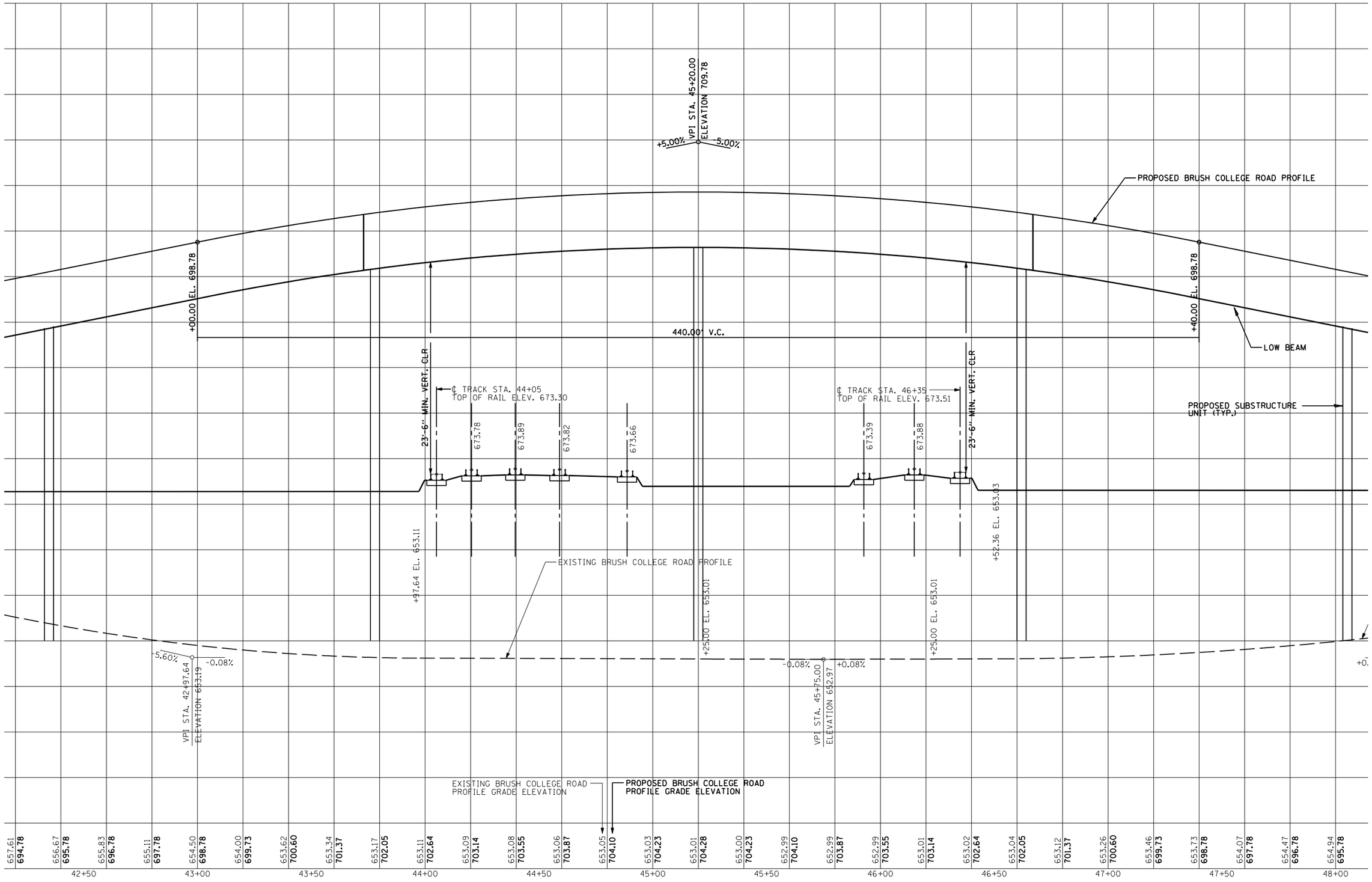
(4)

City of Decatur

Brush College Road at Norfolk Southern Crossing Study

Preliminary Pier Layout for Overpass Option

N
50
0
50
SCALE IN FEET
ARCHER DANIELS MIDLAND COMPANY
ARCHER DANIELS MIDLAND COMPANY
ARCHER DANIELS MIDLAND COMPANY
115'
145'
145'
145'
145'
145'
145'
115'
25'
25'
25'
22'
DECATUR TOWNSHIP
DEANNA RAMSEY
DELORES J. & GEORGE NEWBERRY
VICTORIA LANGLEY
RECTO & LORENZA GONZAGA
TERRY HALL
E. HICKORY
RONS GARAGE
RON'S GARAGE
RONS GARAGE
PROPOSED OVERPASS SUBSTRUCTURE UNIT (TYP.)
℄ EXISTING ROADWAY
℄ PROPOSED OVERPASS STRUCTURE
ARCHER DANIELS MIDLAND COMPANY
ARCHER DANIELS MIDLAND COMPANY
ARCHER DANIELS MIDLAND COMPANY
ARCHER DANIELS MIDLAND COMPANY
ARCHER MIDLAND



PROPOSED OVERPASS PROFILE (LOOKING WEST)

VERT. SCALE = 4 X HORZ.

"Himstedt, Lynn W." <lynn.himstedt@nscorp.com>
03/04/2011 10:12 PM

To "Keith_Benting@urscorp.com" <Keith_Benting@urscorp.com>
cc
bcc
Subject FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Keith

Dave Foutz and Ed Lane is ok with the site distance of 1100 ft after the new bridge is erected. All of our trains stop to be re-crewed at the D 373 mile post at Brush Tower. At that point they would have enough of a view for train handling.

Lynn W. Himstedt
C&S Supervisor
Decatur, Ill 62521
Office Phone: 217-425-2154
Cell Phone: 217-433-3293

From: Lane, Ed
Sent: Friday, March 04, 2011 12:52 PM
To: Himstedt, Lynn W.
Cc: Kazmierczak, James R.; Caldwell, David G.
Subject: FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Lynn,

See comments below.

Ed

From: Foutz, David L.
Sent: Friday, March 04, 2011 12:39 PM
To: Lane, Ed
Cc: Wilson, Rennie R.
Subject: FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Ed

Based on our conversation and field observations, I agree with below.

DLF

From: Lane, Ed
Sent: Thursday, March 03, 2011 2:04 PM
To: Foutz, David L.; Nixon, Bradley

Subject: FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Dave,

I would think 1100' of preview on signal should be enough with trains stopping to change crews at this point. Your thoughts?

Ed

From: Himstedt, Lynn W.
Sent: Tuesday, March 01, 2011 6:48 PM
To: Lane, Ed; Caldwell, David G.
Cc: Wiggins, Randy D.
Subject: FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

For your review and approval. Do we need to send this on to Tony Grim?

Lynn W. Himstedt
C&S Supervisor
Decatur, Ill 62521
Office Phone: 217-425-2154
Cell Phone: 217-433-3293

From: Keith_Benting@urscorp.com [mailto:Keith_Benting@urscorp.com]
Sent: Tuesday, March 01, 2011 11:43 AM
To: Himstedt, Lynn W.
Cc: Kazmierczak, James R.; Wasilisian, James; MCave@decaturil.gov
Subject: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Lynn,

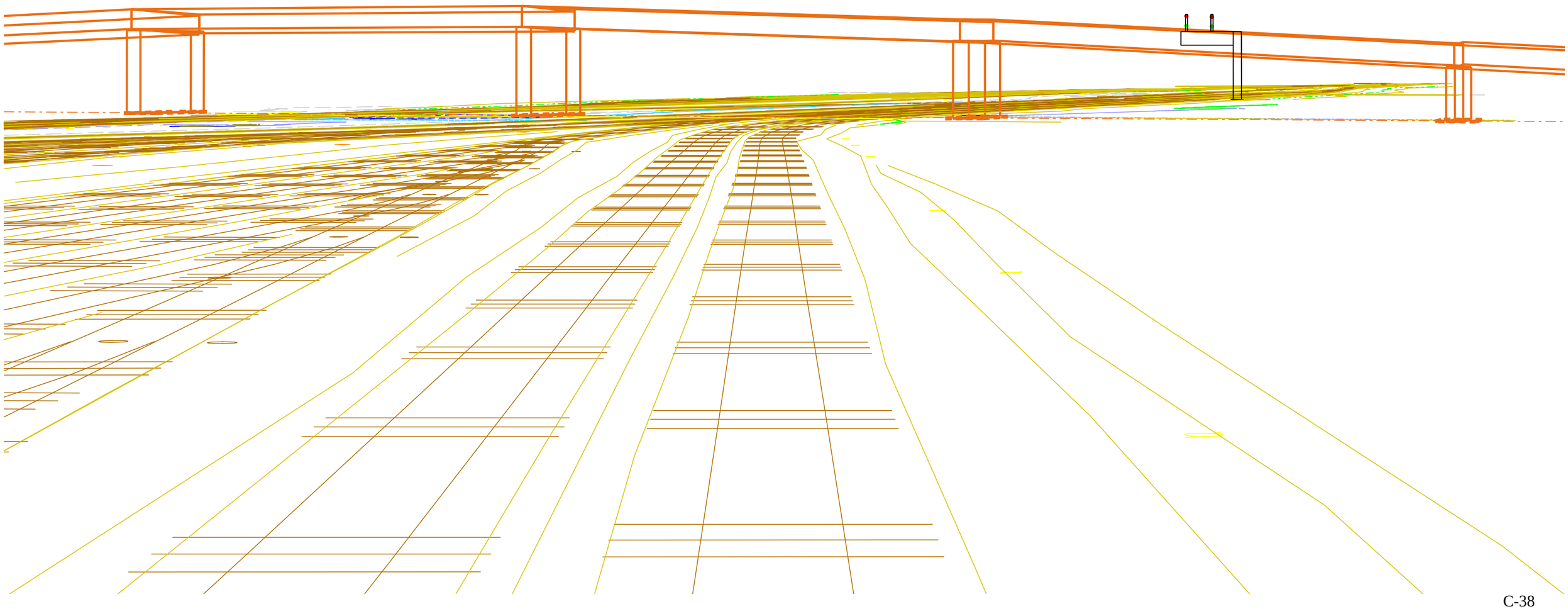
At our initial meeting with Jim Kazmierczak on 11/4/2010, we were told that we would have to perform a line of sight study for the overpass option to make sure that the signal, located east of the existing underpass at Brush College Road, could be seen by eastbound trains.

I have attached two views from our analysis using the preliminary bridge profile and pier placement for the overpass option.The line of site has been located 14.5' above top of rail. The first view is 2300 feet from the signal. The girders are transparent in this model. The signals can be seen above the superstructure, but most likely they will be obstructed by the bridge parapets, fencing and traffic.

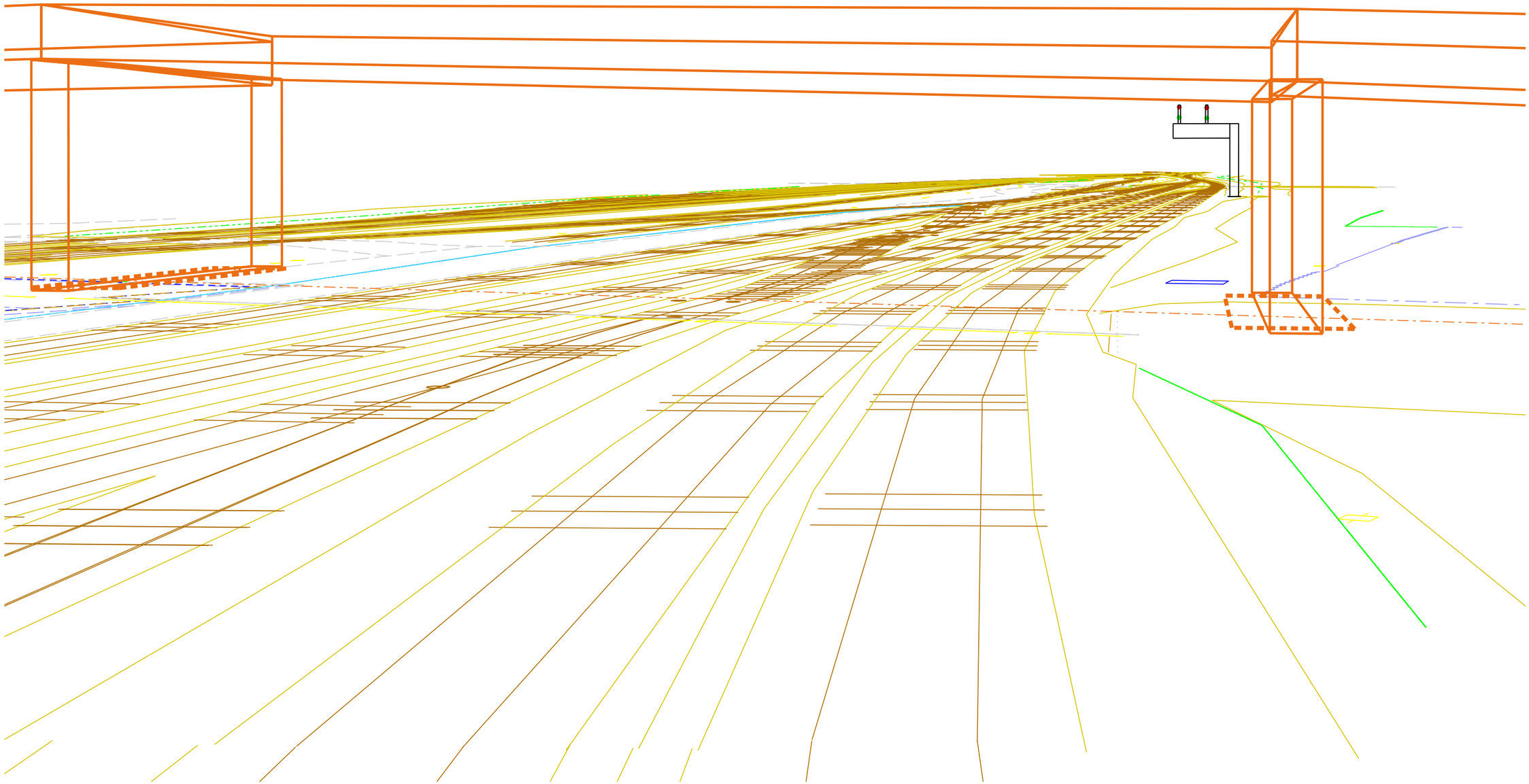
The second view is 1100 feet from the signal and the signal is visible at this point. For a 20 mph speed, I assume that a longer site distance will be required.

Our preference would be not to raise the bridge or move the pier. Are there other options for this signal? Could a second signal be established on the west side of the overpass?

2300 Feet



1150 Feet



"Kazmierczak , James R."
<james.kazmierczak @nscorp.com>
04/11/2011 09:55 AM

To "'Keith_Benting@urscorp.com'" <Keith_Benting@urscorp.com>
cc
bcc
Subject RE: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

History: This message has been replied to.

Keith,

No issues with this span arrangement

James R. Kazmierczak
Engineer Public Improvements
1200 Peachtree St NE
Atlanta, Ga 30309
404-529-1256

From: Keith_Benting@urscorp.com [mailto:Keith_Benting@urscorp.com]
Sent: Thursday, February 24, 2011 10:13 AM
To: Kazmierczak, James R.
Cc: MCave@decaturil.gov; Thomas_Nord@urscorp.com
Subject: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Jim,

Please let me know if there are any issues with the span arrangement shown on the attached aerial.

Keith W. Benting, P.E., S.E.
Group Manager - Structures
URS Corporation
345 East Ash Ave.
Decatur, IL 62526
Phone: (217)-875-4800
FAX: (217)-875-3577
email: keith_benting@urscorp.com

This e-mail and any attachments contain URS Corporation confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.

May 25, 2012

Norfolk Southern Corporation
1200 Peachtree St. NE
Atlanta, Georgia 30309

Attention: James R. Kazmierczak
Engineer Public Improvements

Re: **City of Decatur – Brush College Road Improvement Study**
Proposed Improvements and Potential Impacts to Norfolk Southern
File # BR0020452, Milepost D-372.9

Dear Mr. Kazmierczak:

Enclosed for your review and comment are two (2) copies of a summary of the proposed improvements to Brush College Road and the potential impacts to Norfolk Southern. A CD containing a pdf version of the summary is also enclosed if additional copies are needed. Some of this material has been submitted before but is included here as a complete package of information for review.

Although the Brush College Road Improvement Study is not completed, the attached gives an overview of the proposed improvements that have been identified to date. The proposed improvements include an overpass at the NS yard that will replace the current two-lane underpass, as well as an overpass at Faries Parkway and the NS track just north of the Brush College Road/Faries Parkway intersection.

Please contact me if you have any questions regarding this matter.

Sincerely,

URS Corporation

Keith W. Benting, P.E., S.E.
Project Manager

Enclosure

KWB/kwb
Enclosure
36432772.02000

cc: Mary Cave / City of Decatur (w/o Enclosure)

S:\36432772\Communications\letters\Summary of Impacts to NS 5-25-12

City of Decatur
Macon County, Illinois
Brush College Road Improvement Study
File #BR0020452
Milepost D-372.9

Potential Impacts to Norfolk Southern Railway

May 2012

Prepared by

345 East Ash Avenue, Suite B
Decatur, IL 62526
217-875-4800

URS Corporation has been retained by the City of Decatur to conduct a study and provide Phase I engineering services for the improvement of the Brush College Road corridor and underpass from William Street Road to Faries Parkway.

The corridor study identified future year roadway improvements. These improvements include the widening of Brush College Road, intersection improvements at William Street, intersection improvements at Marietta Street/ADM Research Center, and a new overpass at the Norfolk Southern (NS) rail yard (currently a two-lane underpass).

The traffic analysis showed that under normal conditions these improvements would accommodate future year (2035) traffic levels; however, an at-grade train crossing Brush College, immediately north of Faries Parkway, would create significant travel delays similar to what frequently occurs today. According to a Decatur area rail model, developed as part of the Decatur Area Transportation Efficiency Study (DATES), the NS at-grade rail crossing of Brush College Road is blocked approximately 17.2 hours per week – the highest at-grade rail crossing delay within the Decatur region. Put another way, Brush College Road at the NS crossing is blocked approximately 900 hours per year.

Additional analysis was completed to evaluate potential improvements to eliminate the NS/Brush College Road at-grade rail crossing delay. After considering a range of potential improvements, a Brush College Road overpass of the NS crossing, and Faries Parkway, was evaluated further. To facilitate traffic movements between Brush College Road and Faries Parkway, a "jug handle," or ramp, is needed in the southeast quadrant of the intersection. The "jug handle" would shift the Brush College/Faries intersection slightly east and would create a new intersection along Brush College, slightly south of Faries. Two forms of traffic control are being evaluated at these intersections, 1) traffic signals, and 2) modern roundabouts.

This summary provides a description of potential impacts to Norfolk Southern Railway as a result of the proposed improvements and is being submitted for review and comment.

Exhibits

The following exhibits have been provided to help convey the details of the proposed improvements:

1. Exhibit A - Plan view showing location of substructure units for proposed overpass at NS yard. (Previously submitted to NS on 2/24/11)
2. Exhibit B - Renderings of overpass carrying Brush College Road over the Norfolk Southern Rail yard
3. Exhibit C - Cross sections

4. Exhibit D – Preliminary Type, Size and Location drawing for proposed structure over the NS yard.
5. Exhibit E – Plan view showing proposed location for utility corridor. Utilities to be jack and bored under NS yard.
6. Exhibit F – Plan view showing proposed re-routing of ADM steam line attached to existing underpass. Steam line would remain attached to bay carrying IC Staley Lead track.
7. Exhibit G – Line of Sight Study
8. Exhibit H – Photos of existing structure over the IC Staley Lead track
9. Exhibit I – Plan view showing proposed overpass at Faries Parkway
10. Exhibit J – Preliminary Type, Size and Location drawing for proposed structure over Faries Parkway and the NS single track just north of the intersection

Proposed Improvements at the Norfolk Southern Yard Crossing

1. Construct new overpass carrying Brush College Road over the Norfolk Southern yard. (See Exhibit A, B and D)
2. The existing underpass consists of two bays. The bay carrying Brush College Road will be filled. The bay carrying the IC Staley Lead Track will remain as it is. See Exhibit C3 – Station 43+84 to Station 45+23 and Station 45+62 to Station 46+53.
3. URS took photos of the span carrying the NS yard over the IC Staley Lead track in January of 2011. The photos are included as Exhibit H.
4. A cast-in-place retaining wall will be constructed inside the existing underpass to retain the fill that will be placed in the existing underpass. (See Exhibit C3)
5. In the gap between the existing underpasses and beyond each end of the underpass, Mechanically Stabilized Earth (MSE) retaining walls are proposed and would be placed adjacent to the CN tracks to retain the fill placed at the approaches to the existing underpass. (See Exhibit C)
6. The piers that will support the proposed overpass at the NS yard will not allow the placement of utilities under the Brush College Road overpass. A new utility corridor is proposed that would be located to the east of Brush College Road. A 36” storm sewer, a 24” water line, and a telephone line would need to be bored, jacked and tunneled under the rail yard, each in an appropriately sized steel casing. (See Exhibit E)
7. The ADM steam line currently attached to the existing underpass would remain in the bay carrying the IC Staley Lead track. The steam line would be rerouted on the north side of the underpass as shown in Exhibit F.

A line of sight study was conducted in March of 2011. See Exhibit G for the related drawings and correspondence.

URS contacted Lynn Himstedt of Norfolk Southern regarding power and phone cable in the NS yard. We understand that these utilities will need to remain in operation during construction and that funds will be allocated to relocate them. According to Mr. Himstedt, the Communications & Signal Department is responsible for the phone cable and the Mechanical Department is responsible for the yard power.

Proposed Overpass at Faries Parkway

The layout of the proposed overpass at Faries Parkway is under development. The preliminary scheme is to construct a 4-span structure as shown in Exhibit I and J.

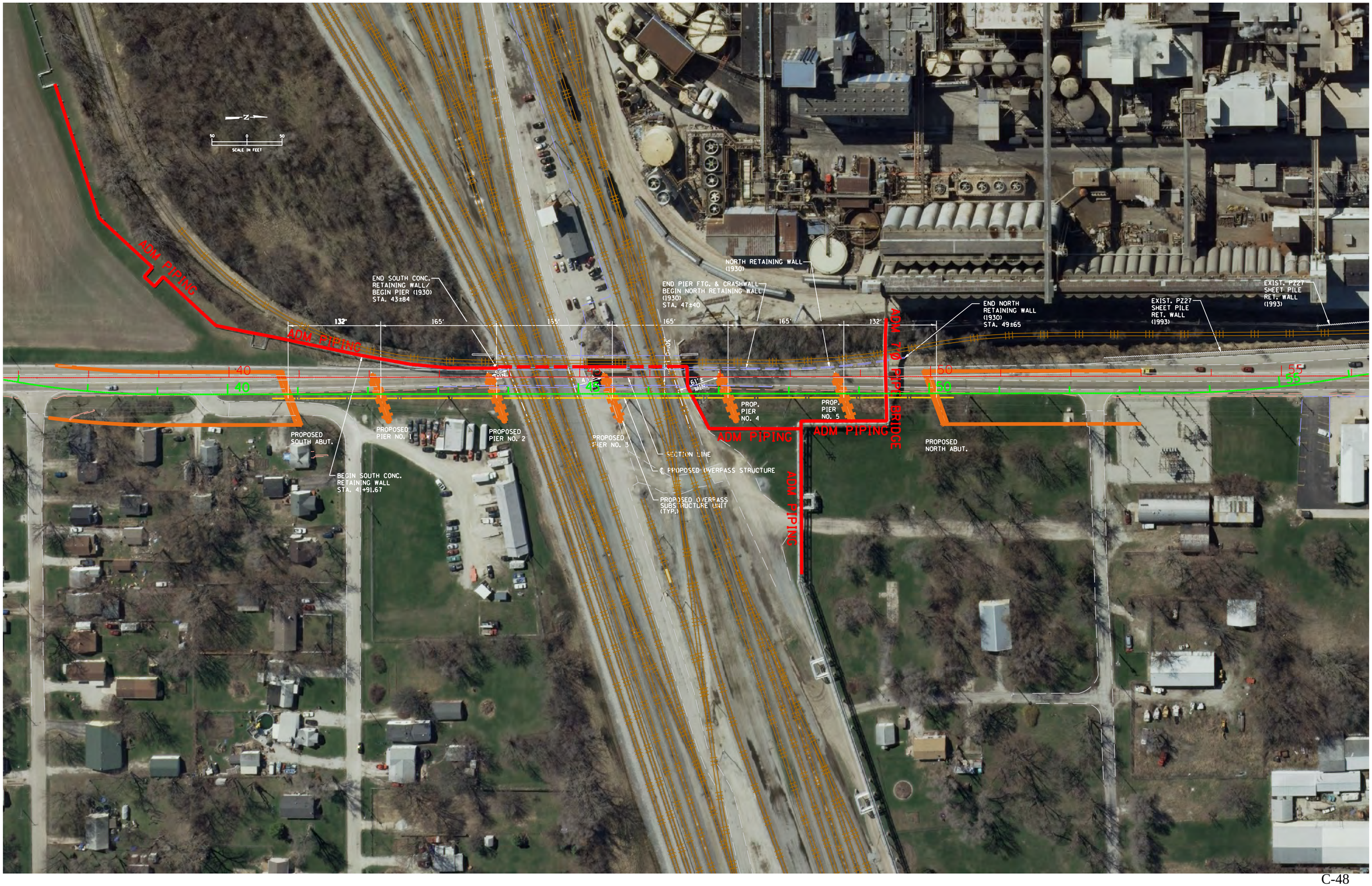
Responding to Questions Regarding Proposed Options

Responses, questions and comments may be directed to:

Keith W. Benting, P.E., S.E.
Project Manager
URS Corporation
345 East Ash Avenue, Suite B
Decatur, IL 62526
Phone: 217-875-4800
FAX: 217-875-3577
Email: keith.benting@urs.com

Exhibit A

Plan – Proposed Substructure Layout
Brush College Road over NS Yard



N
SCALE IN FEET
ADM PIPING
END SOUTH CONC. RETAINING WALL/ BEGIN PIER (1930) STA. 43±84
END PIER FTG. & CRASHWALL BEGIN NORTH RETAINING WALL (1930) STA. 47±40
NORTH RETAINING WALL (1930)
END NORTH RETAINING WALL (1930) STA. 49±65
EXIST. PZ27 SHEET PILE RET. WALL (1993)
EXIST. PZ27 SHEET PILE RET. WALL (1993)
132'
165'
165'
165'
165'
132'
40
40
50
50
55
PROPOSED SOUTH ABUT.
PROPOSED PIER NO. 1
PROPOSED PIER NO. 2
PROPOSED PIER NO. 3
PROP. PIER NO. 4
PROP. PIER NO. 5
ADM PIPING
ADM PIPING
ADM PIPING
ADM 7.0 PIPE BRIDGE
PROPOSED NORTH ABUT.
BEGIN SOUTH CONC. RETAINING WALL STA. 41+91.67
SECTION LINE
℄ PROPOSED OVERPASS STRUCTURE
PROPOSED OVERPASS SUBSTRUCTURE UNIT (TYP.)

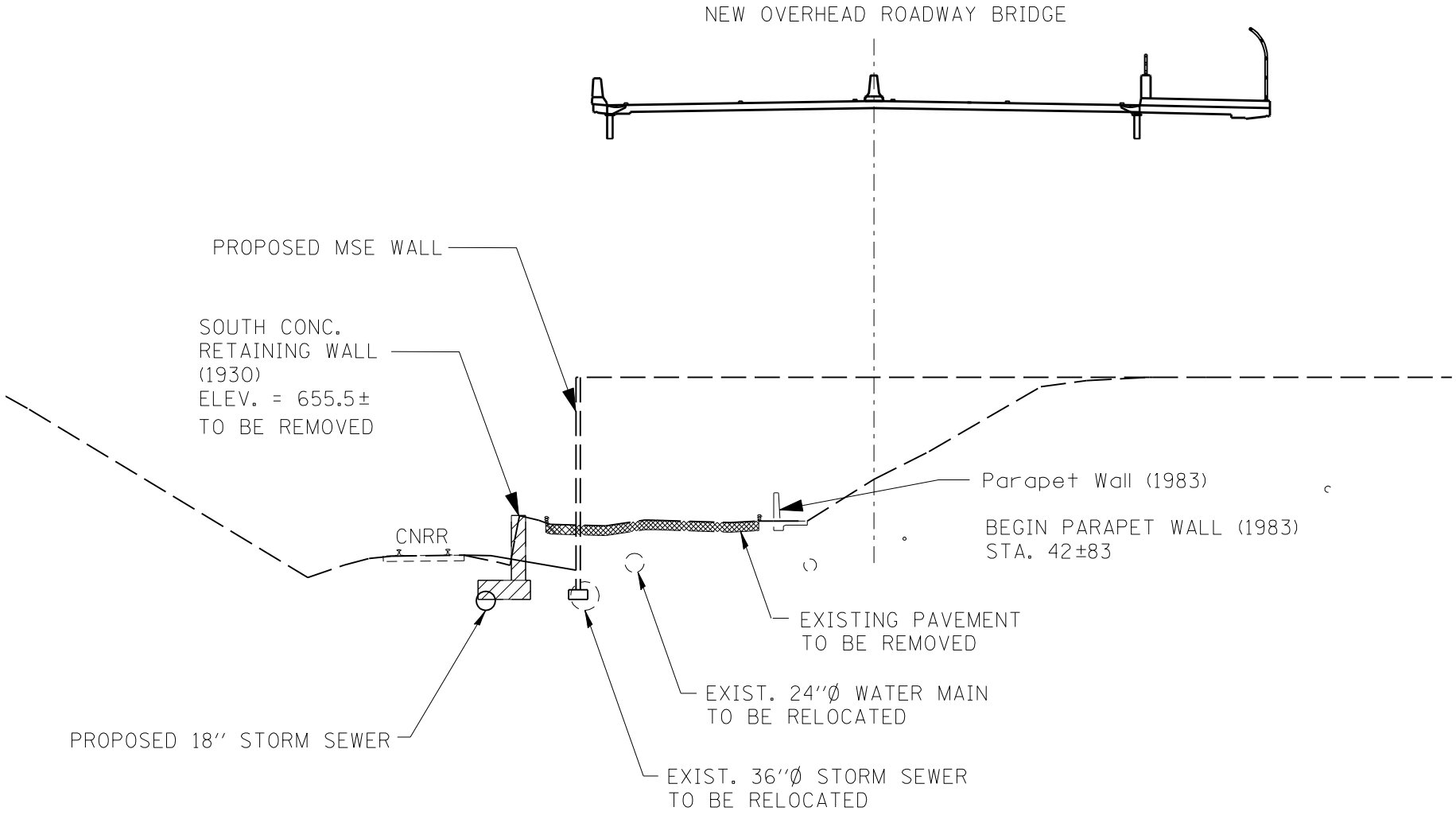
Exhibit B

Rendering

Brush College Road over NS Yard

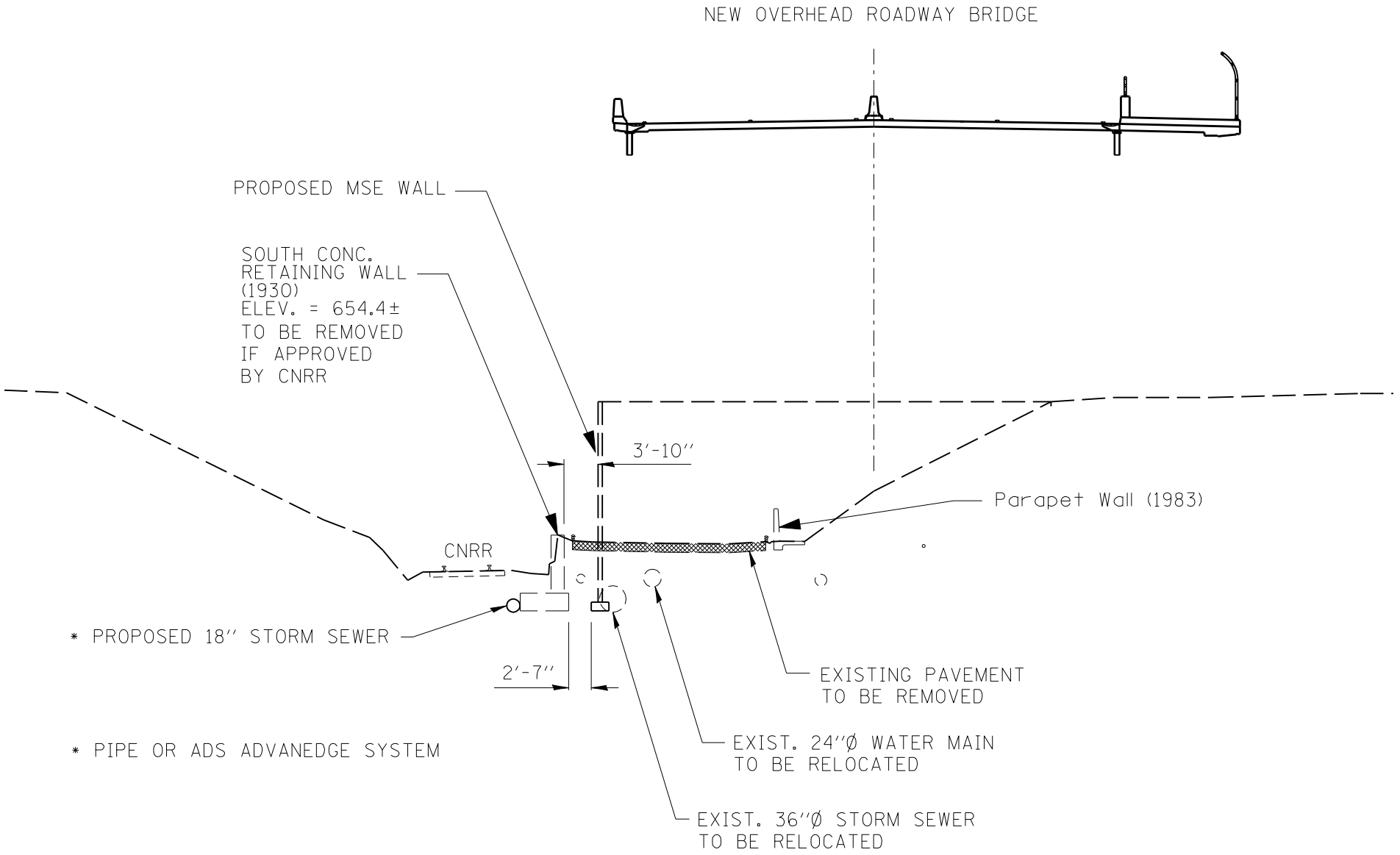
Exhibit C

Cross Sections



TYPICAL SECTION
LOOKING NORTH
STA. 42+37 TO STA. 43+16

EXHIBIT C1

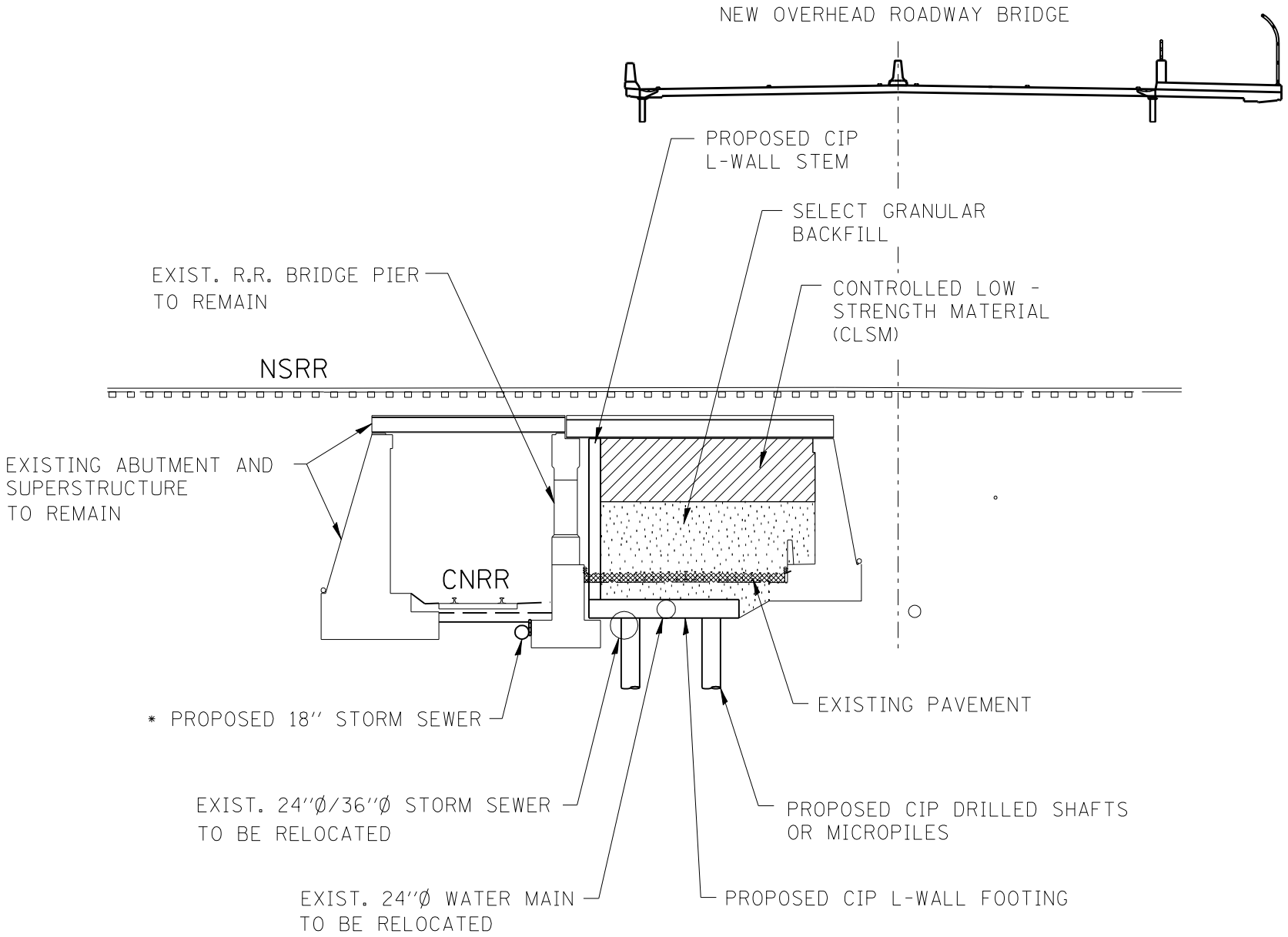


TYPICAL SECTION

LOOKING NORTH

STA. 43+16 TO STA. 43+84

EXHIBIT C2



* PIPE OR ADS ADVANEDGE SYSTEM

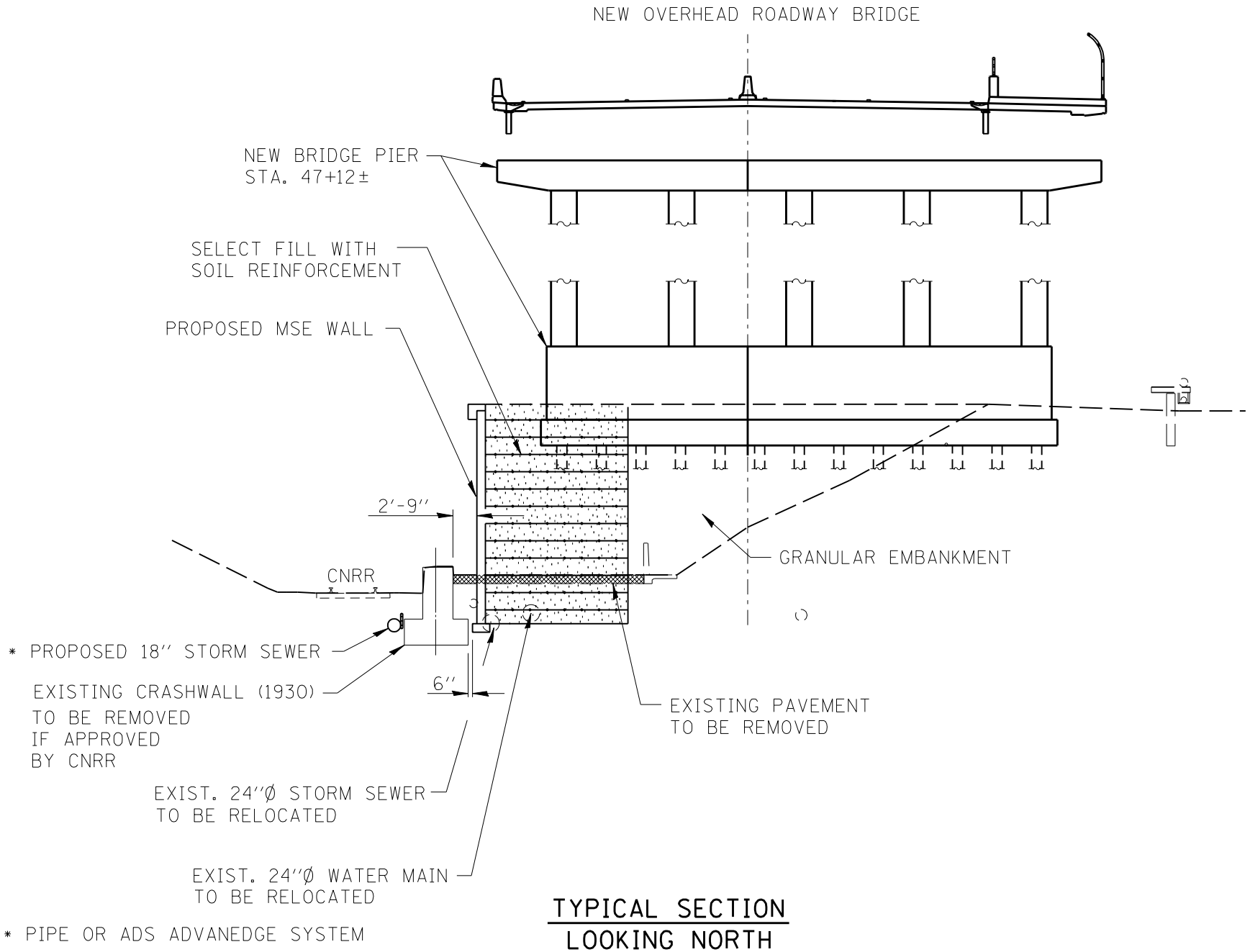
TYPICAL SECTION

LOOKING NORTH

STA. 43+84 TO STA. 45+23

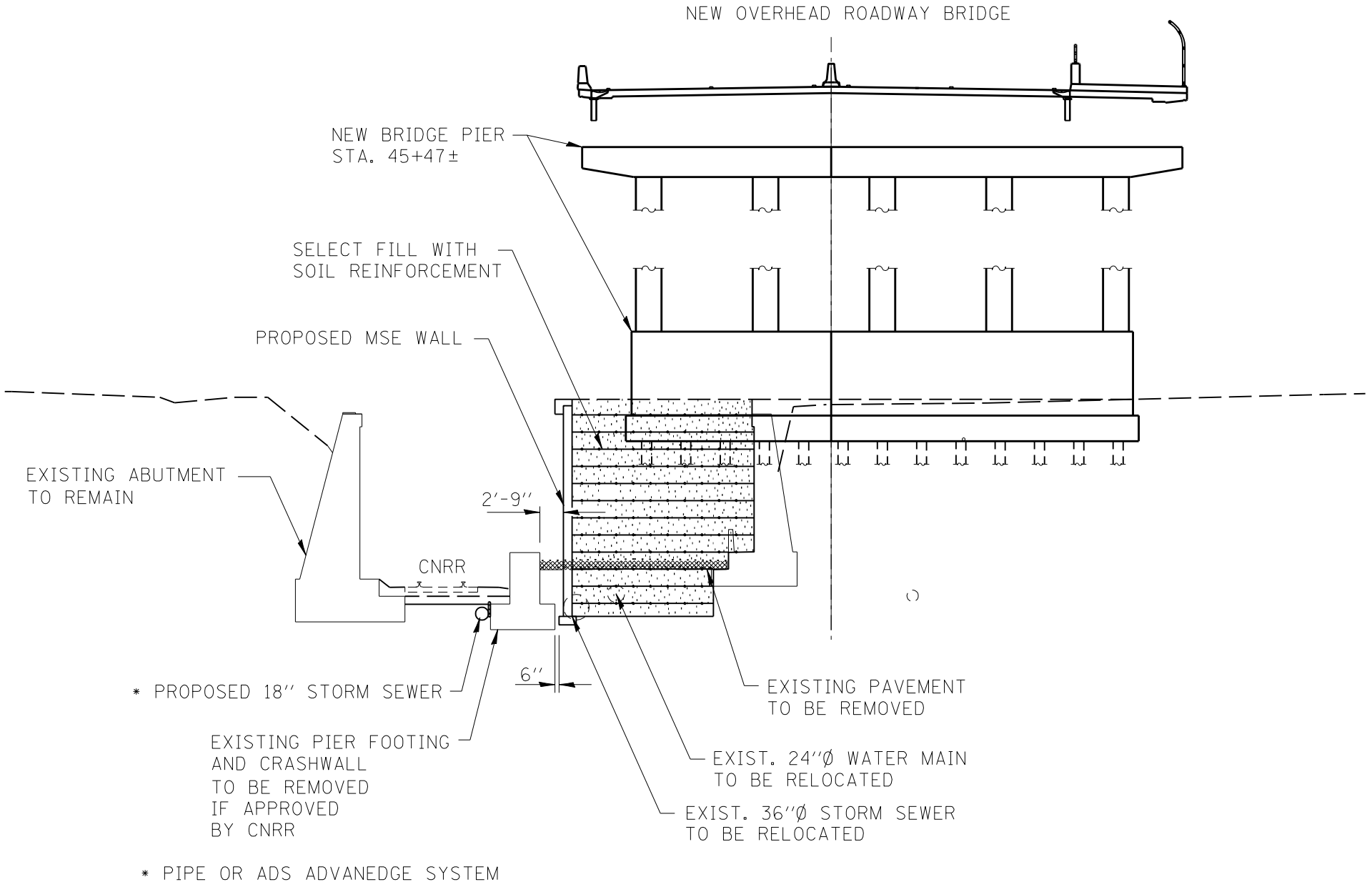
STA. 45+62 TO STA. 46+53

EXHIBIT C3



TYPICAL SECTION
LOOKING NORTH
STA. 46+53 TO STA. 47+40

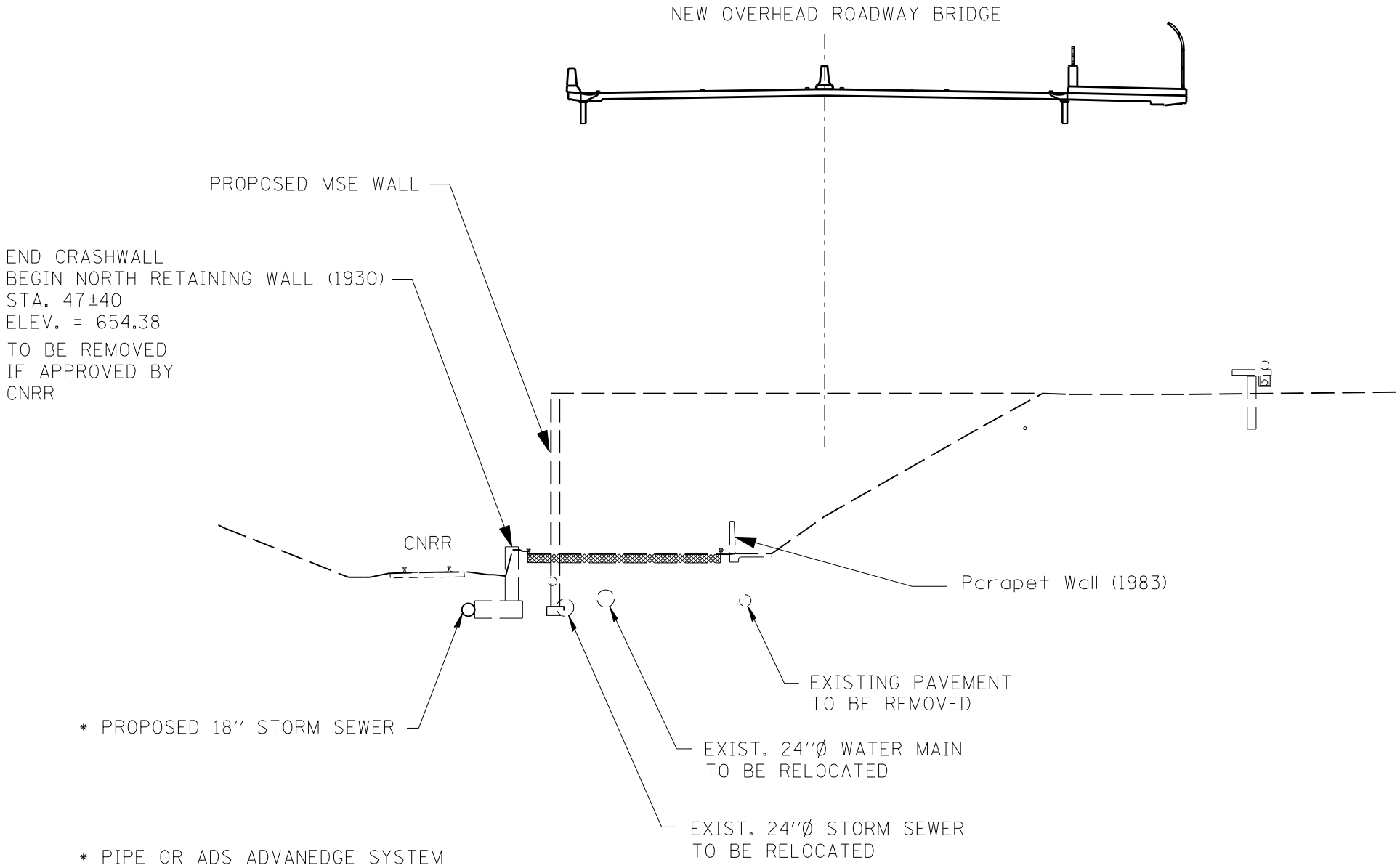
EXHIBIT C4



* PIPE OR ADS ADVANEDGE SYSTEM

TYPICAL SECTION
LOOKING NORTH
STA. 45+23 TO STA. 45+62

EXHIBIT C5



TYPICAL SECTION
LOOKING NORTH
STA. 47+40 TO STA. 47+80

EXHIBIT C6

Exhibit D

Preliminary Type, Size & Location Drawing

Brush College Road over NS Yard

Existing Structure:
Stucture No. 058-3013
Subway built in 1929 and extended in 1951 carries Norfolk Southern Railroad over Brush College Road (2 lanes) and Illinois Central Railroad (1 track).
Bridge is a concrete deck on steel stringers with concrete piers and closed concrete abutments on spread footings.

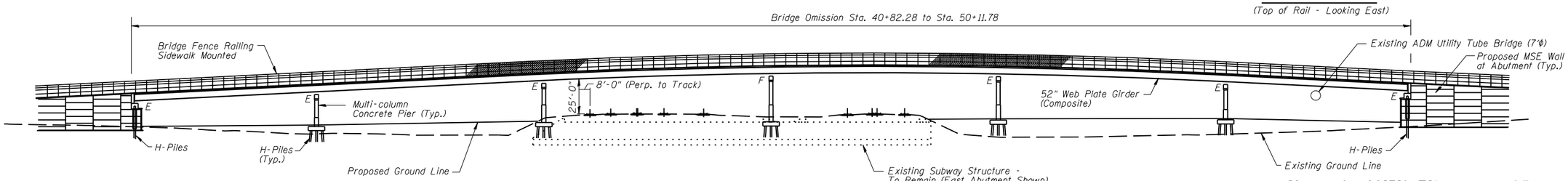
Benchmark:
"M" in Mueller on fire hydrant at Southeast corner of Cerro Gordo St. and Brush College Rd. - Elev. 652.58.

Road will be closed during construction.

Existing structure will remain in place. Portions will be removed at proposed pier locations.

Sta. 95+65.3	Sta. 96+16.9	Sta. 96+66.4	Sta. 97+19.2	Sta. 97+95.3	Sta. 98+61.5	Sta. 99+34.4	℄ N.S.R.R. W.B. Running Track Sta. 100+00	Sta. 100+34.5	Sta. 101+74.9	Sta. 102+25.3	Sta. 102+76.7	Sta. 103+90.1	Sta. 104+40.5
Elev. 654.66	Elev. 654.08	Elev. 653.57	Elev. 653.15	Elev. 652.66	Elev. 651.96	Elev. 651.25	Elev. 650.83	Elev. 650.61	Elev. 650.38	Elev. 651.41	Elev. 652.18	Elev. 652.58	Elev. 652.95

PROFILE - ICRR
(Top of Rail - Looking East)



HIGHWAY CLASSIFICATION
F.A.U. Rte. 7448 - Brush College Road
Functional Class: Urban Minor Arterial
ADT: 13,900 (2010), 18,950 (2035)
Directional Split: 50:50
ADTT: 9.0%
DHV: 1900 (2035)
Design Speed: 40 m.p.h.
Posted Speed: 35 m.p.h.
Two-Way Traffic

DESIGN SPECIFICATIONS
2012 AASHTO LRFD Bridge Design Specifications

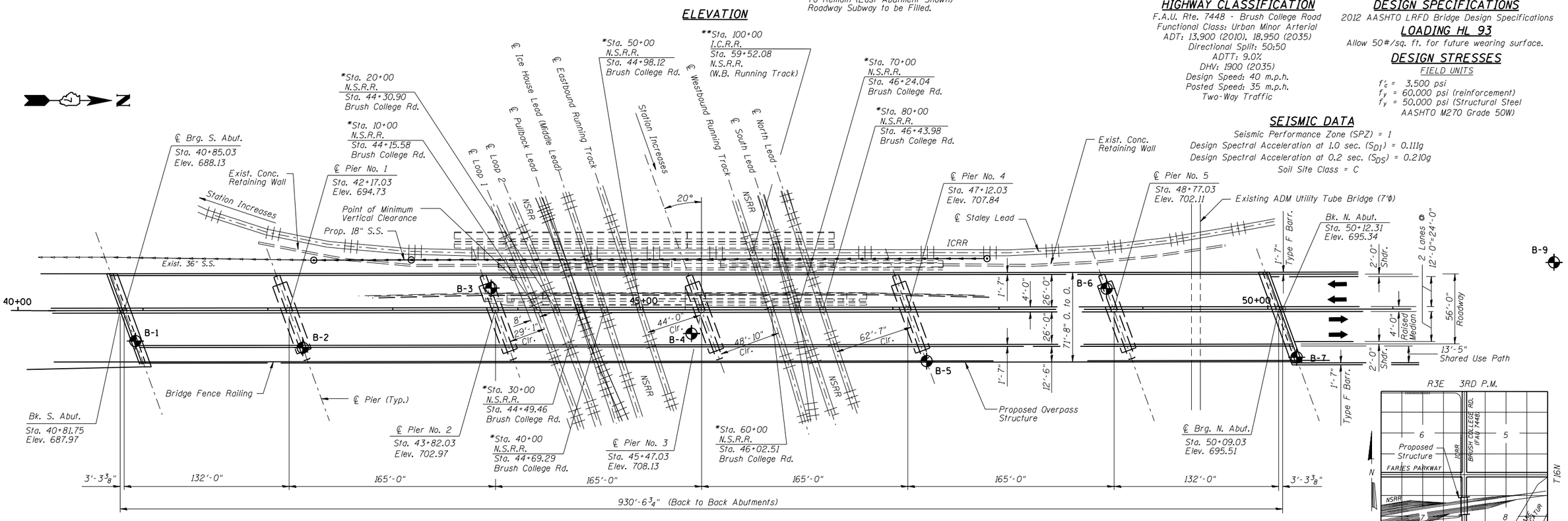
LOADING HL 93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (Structural Steel AASHTO M270 Grade 50W)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.111g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.210g
Soil Site Class = C

ELEVATION

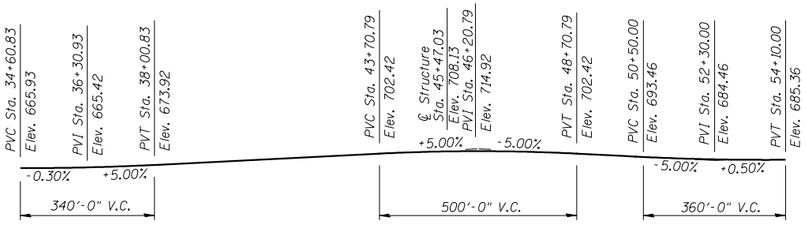


* Plan Station = Val Map Station 72+74.0
Val Map: 5-ILL.BD 20

** Plan Station = Val Map Station 59+14.0
Val Map: 1-ILL-61 11b

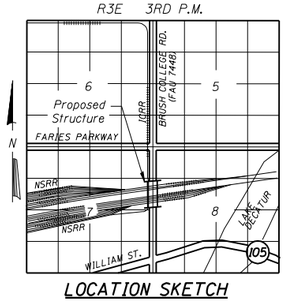
PLAN

Track	Station 1	Elev. A	Station 2	Elev. B	Station 3	Elev. C
Loop 1	8+92.72	673.37	9+91.15	673.28	10+89.61	673.09
Loop 2	18+82.17	673.87	19+78.77	673.77	20+74.21	673.54
Pullback Lead	28+66.82	674.06	29+79.44	673.89	30+05.95	673.77
Ice House Lead	38+62.85	673.82	39+59.15	673.84	40+57.39	673.72
E.B. Running Track	48+84.55	673.66	49+87.43	673.66	50+85.42	673.60
W.B. Running Track	58+62.90	673.63	60+17.65	673.24	60+99.53	672.67
South Lead	68+61.62	673.88	69+70.17	673.89	70+97.13	673.39
North Lead	79+00.04	673.70	80+07.01	673.46	81+07.73	673.13



PROFILE - BRUSH COLLEGE ROAD

PROFILE - NSRR
(Top of Rail - Looking North)



LOCATION SKETCH

GENERAL PLAN
FAU 7448 (BRUSH COLLEGE ROAD) OVER NSRR
SECTION 09-00933-00-BR
CITY OF DECATUR
MACON COUNTY
STATION 45+47.03
STRUCTURE NO.

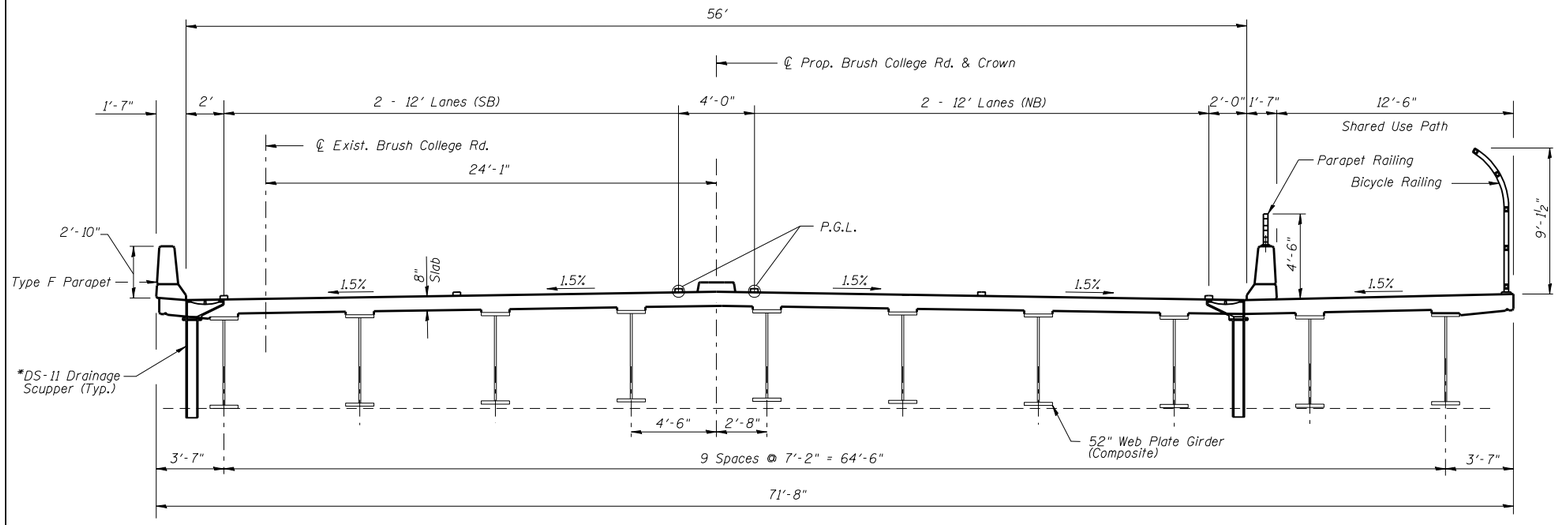
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

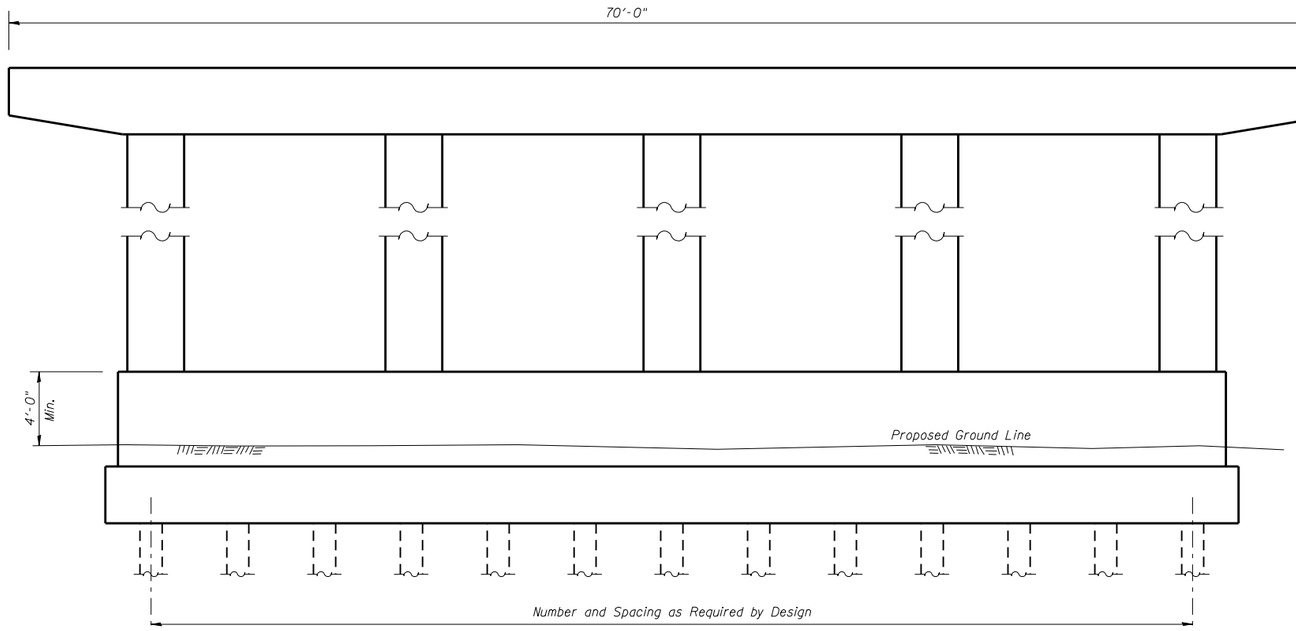
GENERAL PLAN
STRUCTURE NO.

SCALE: | SHEET NO. 1 OF SHEETS | STA. | TO STA.

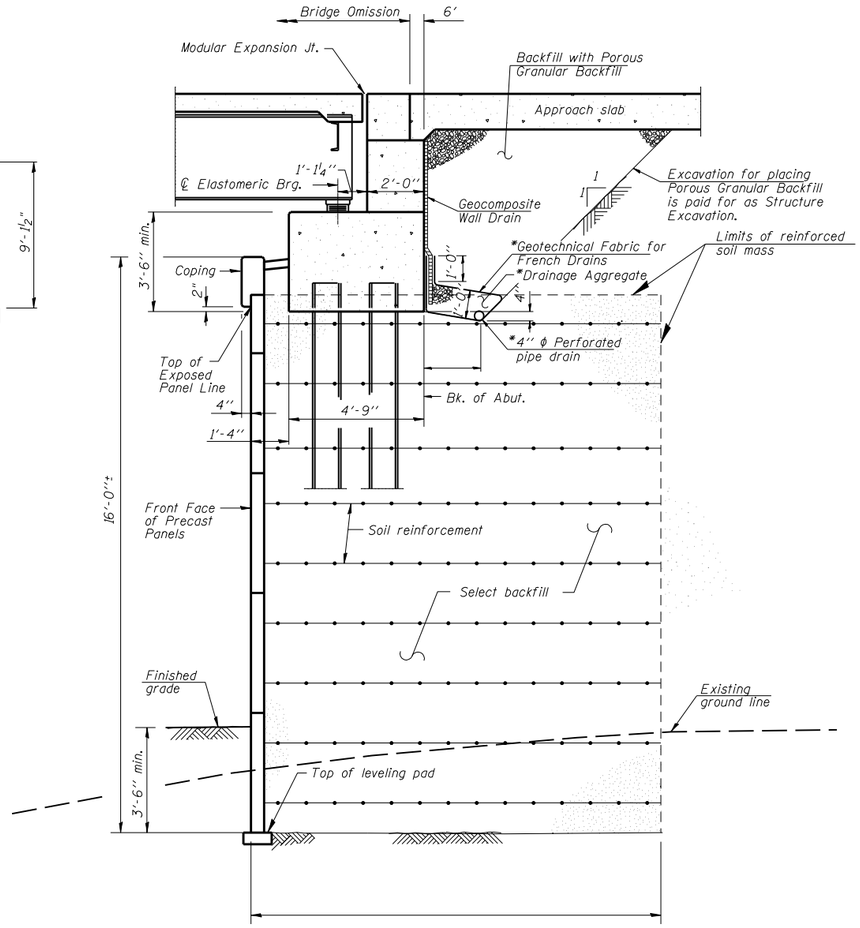
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7448	09-00933-00-BR	MACON		
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			



PROPOSED CROSS-SECTION



ELEVATION - PROPOSED PIER



SECTION THRU ABUTMENT

(Horiz. dim. ℄ Rt. L's)

GENERAL PLAN
FAU 7448 (BRUSH COLLEGE ROAD)
OVER NSRR
SECTION 09-00933-00-BR
CITY OF DECATUR
MACON COUNTY
STATION 45+47.03
STRUCTURE NO.

* No freefall deck drains will be permitted in the spans over the tracks or within 10 ft. of cross arms of a railroad pole line.

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

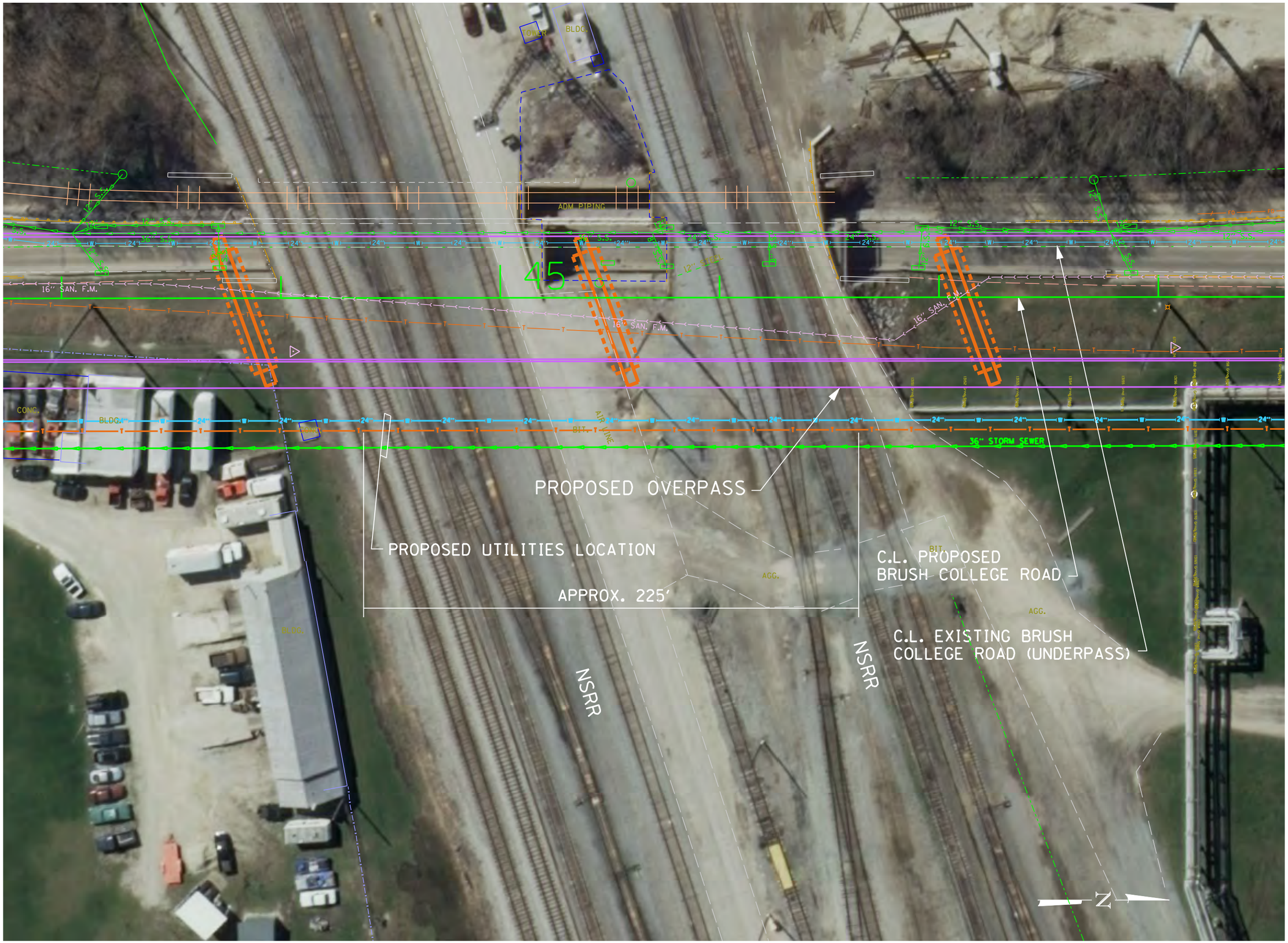
SUPERSTRUCTURE DETAILS
STRUCTURE NO.

SCALE: | SHEET NO. 2 OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7448	09-00933-00-BR	MACON		
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

Exhibit E

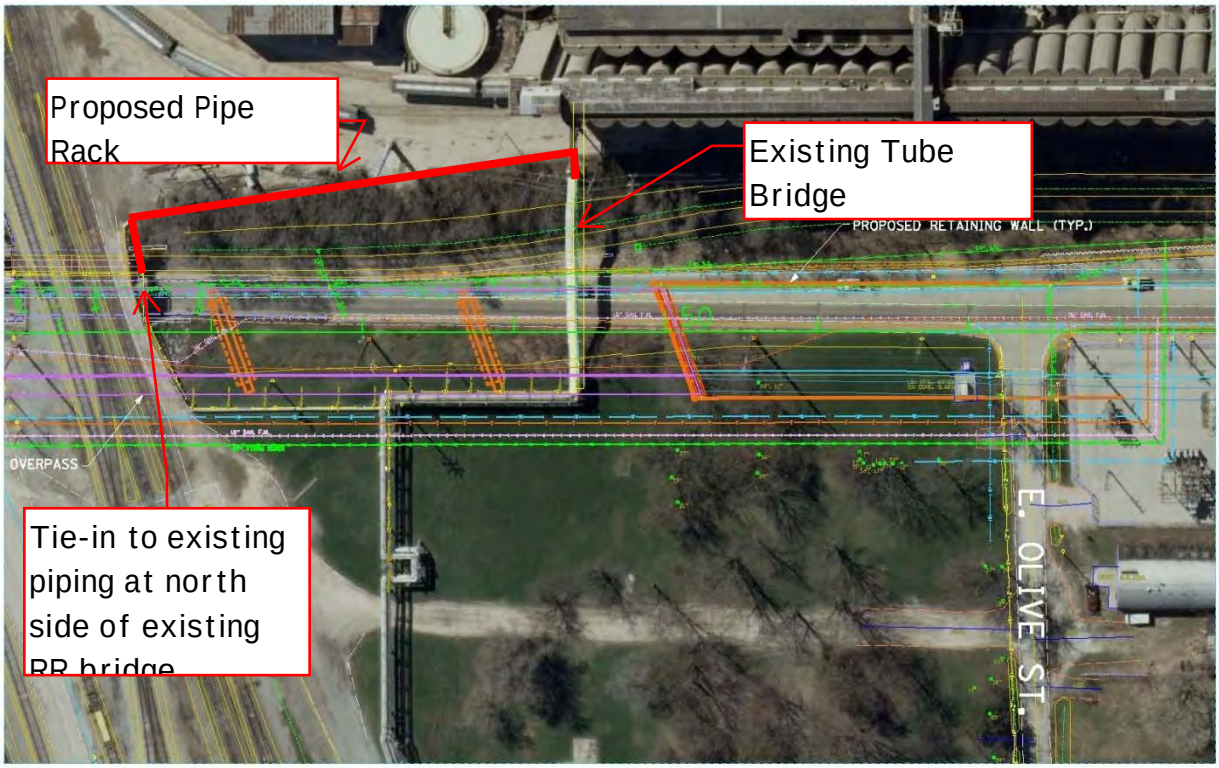
Plan – Proposed Utility Corridor Under NS Yard



TOWER
BLDG.
ADM. PIPING
12" S.S.
36" S.S.
16" SAN. F.M.
45
CONC.
BLDG.
TOWER
BIT.
AIR LINE
36" STORM SEWER
PROPOSED OVERPASS
PROPOSED UTILITIES LOCATION
APPROX. 225'
C.L. PROPOSED
BRUSH COLLEGE ROAD
C.L. EXISTING BRUSH
COLLEGE ROAD (UNDERPASS)
AGG.
NSRR
NSRR
N

Exhibit F

Plan – Proposed Rerouting of ADM Steam Line

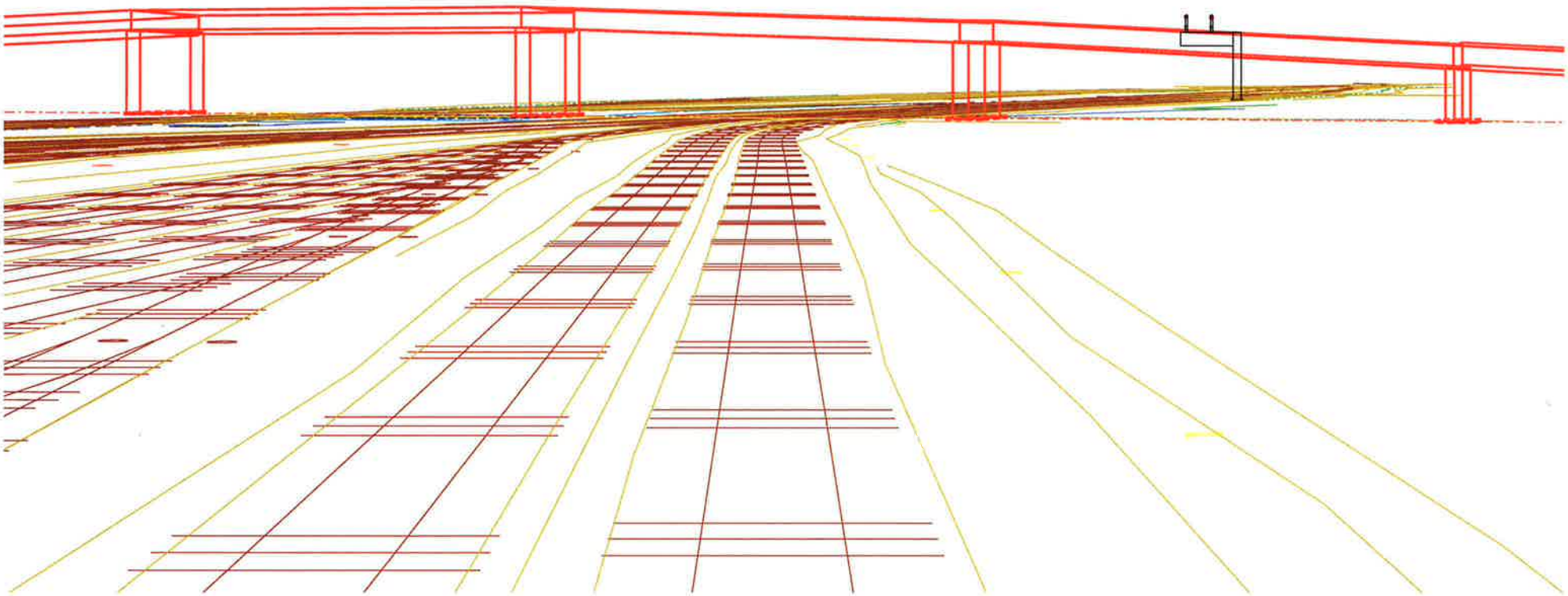


Proposed Utility Corridor for Overpass Option

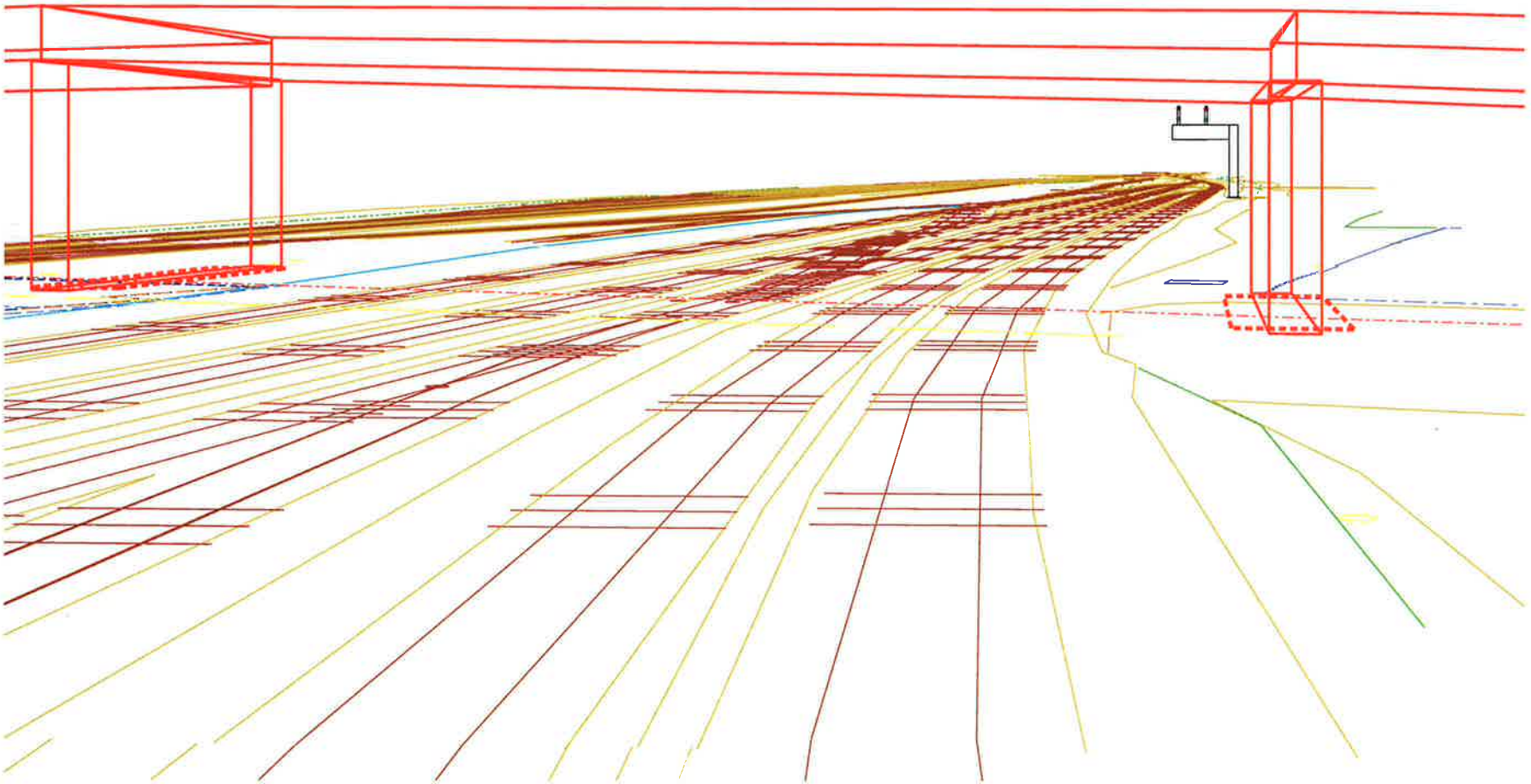
Exhibit G

Line of Sight Study

NS Yard Signal



2,300 Feet from Signal



1,150 Feet from Signal

"Himstedt, Lynn W." <lynn.himstedt@nscorp.com>
03/04/2011 10:12 PM

To "Keith_Benting@urscorp.com" <Keith_Benting@urscorp.com>
cc
bcc
Subject FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Keith

Dave Foutz and Ed Lane is ok with the site distance of 1100 ft after the new bridge is erected. All of our trains stop to be re-crewed at the D 373 mile post at Brush Tower. At that point they would have enough of a view for train handling.

Lynn W. Himstedt
C&S Supervisor
Decatur, Ill 62521
Office Phone: 217-425-2154
Cell Phone: 217-433-3293

From: Lane, Ed
Sent: Friday, March 04, 2011 12:52 PM
To: Himstedt, Lynn W.
Cc: Kazmierczak, James R.; Caldwell, David G.
Subject: FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Lynn,

See comments below.

Ed

From: Foutz, David L.
Sent: Friday, March 04, 2011 12:39 PM
To: Lane, Ed
Cc: Wilson, Rennie R.
Subject: FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Ed

Based on our conversation and field observations, I agree with below.

DLF

From: Lane, Ed
Sent: Thursday, March 03, 2011 2:04 PM
To: Foutz, David L.; Nixon, Bradley

Subject: FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Dave,

I would think 1100' of preview on signal should be enough with trains stopping to change crews at this point. Your thoughts?

Ed

From: Himstedt, Lynn W.
Sent: Tuesday, March 01, 2011 6:48 PM
To: Lane, Ed; Caldwell, David G.
Cc: Wiggins, Randy D.
Subject: FW: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

For your review and approval. Do we need to send this on to Tony Grim?

Lynn W. Himstedt
C&S Supervisor
Decatur, Ill 62521
Office Phone: 217-425-2154
Cell Phone: 217-433-3293

From: Keith_Benting@urscorp.com [mailto:Keith_Benting@urscorp.com]
Sent: Tuesday, March 01, 2011 11:43 AM
To: Himstedt, Lynn W.
Cc: Kazmierczak, James R.; Wasilisian, James; MCave@decaturil.gov
Subject: Decatur, IL - Brush College Road at NS Crossing Study, File #BR0020452, Milepost D-372.9

Lynn,

At our initial meeting with Jim Kazmierczak on 11/4/2010, we were told that we would have to perform a line of sight study for the overpass option to make sure that the signal, located east of the existing underpass at Brush College Road, could be seen by eastbound trains.

I have attached two views from our analysis using the preliminary bridge profile and pier placement for the overpass option.The line of site has been located 14.5' above top of rail. The first view is 2300 feet from the signal. The girders are transparent in this model. The signals can be seen above the superstructure, but most likely they will be obstructed by the bridge parapets, fencing and traffic.

The second view is 1100 feet from the signal and the signal is visible at this point. For a 20 mph speed, I assume that a longer site distance will be required.

Our preference would be not to raise the bridge or move the pier. Are there other options for this signal? Could a second signal be established on the west side of the overpass?

Keith W. Benting, P.E., S.E.
Group Manager - Structures
URS Corporation
345 East Ash Ave.
Decatur, IL 62526
Phone: (217)-875-4800
FAX: (217)-875-3577
email: keith_benting@urscorp.com

This e-mail and any attachments contain URS Corporation confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.

3Dsignal 2300ft.pdf

3Dsignal 1150ft.pdf

brush-college-looking-west-proposed-draft-01.jpg

(This page intentionally left blank)

Exhibit H

Photos of Existing Structure over IC Staley Lead Track

(This page intentionally left blank)

Looking South along IC Staley Lead Track

Looking South along IC Staley Lead Track

Looking North along IC Staley Lead Track

Looking North along IC Staley Lead Track

NW Wingwall – Spalling

North Approach – East Retaining Wall

Abutment Joint – North of South Pier

North Pier – Column 2 (Columns numbered North to South)

North Pier – Column 3

North Pier – Between Column 4 & 5

North Pier – Below Column 7

North Pier – Looking Southwest

North Pier – Looking West

North Pier – South Side of Column 3

North Pier – South Side of Column 4

North Pier – South Side of Column 5

North Pier – South Side of Column 6

South Pier – Second Column from South

South Pier – Third Column from South

South Pier – Looking West

South Pier – Looking West

South Pier – Looking West

Bottom of Deck – North End

Bottom of Deck – North End

Bottom of Deck – South End

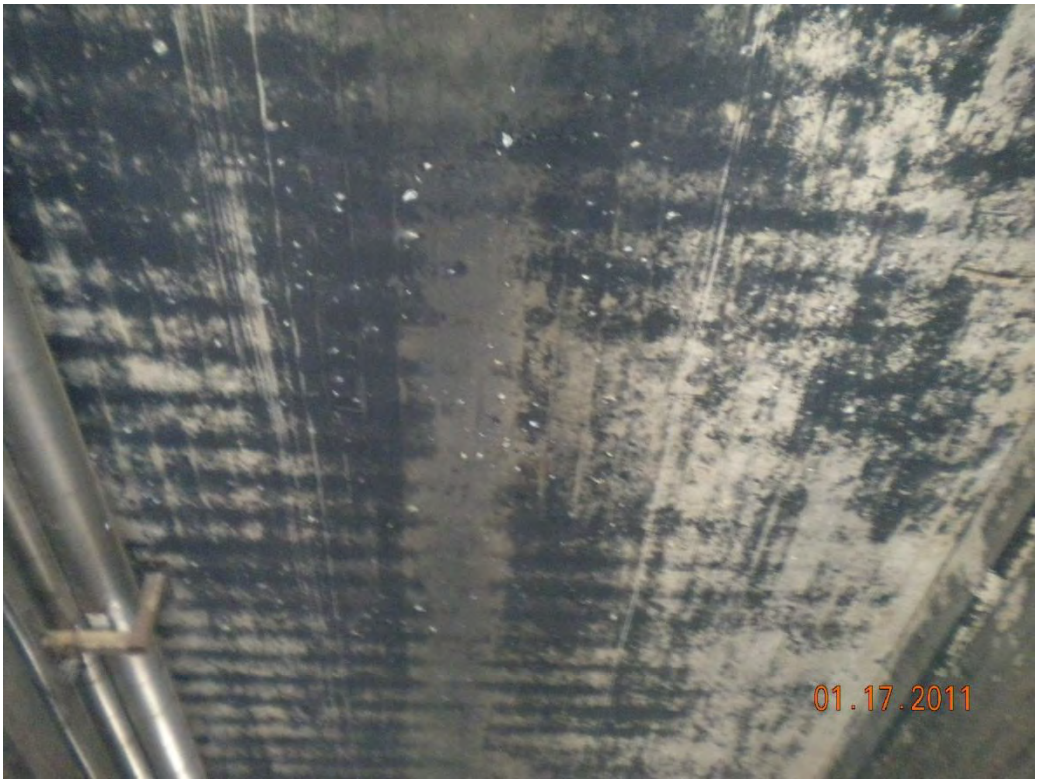
Bottom of Deck – South End

Bottom of Deck – South End

Bottom of Deck – South End

Bottom of Deck – South End

Bottom of Deck – South Structure



Center of Deck – Encased Beams

Hole in Deck – Near Center

Spalling – South End – Encased Beams

Near South End – Encased Beams

North End of Deck – Encased Beams

West Abutment – Weep Hole

West Abutment – North Structure

(This page intentionally left blank)

Exhibit I

Plan – Proposed Structure over Faries Parkway and NS Track

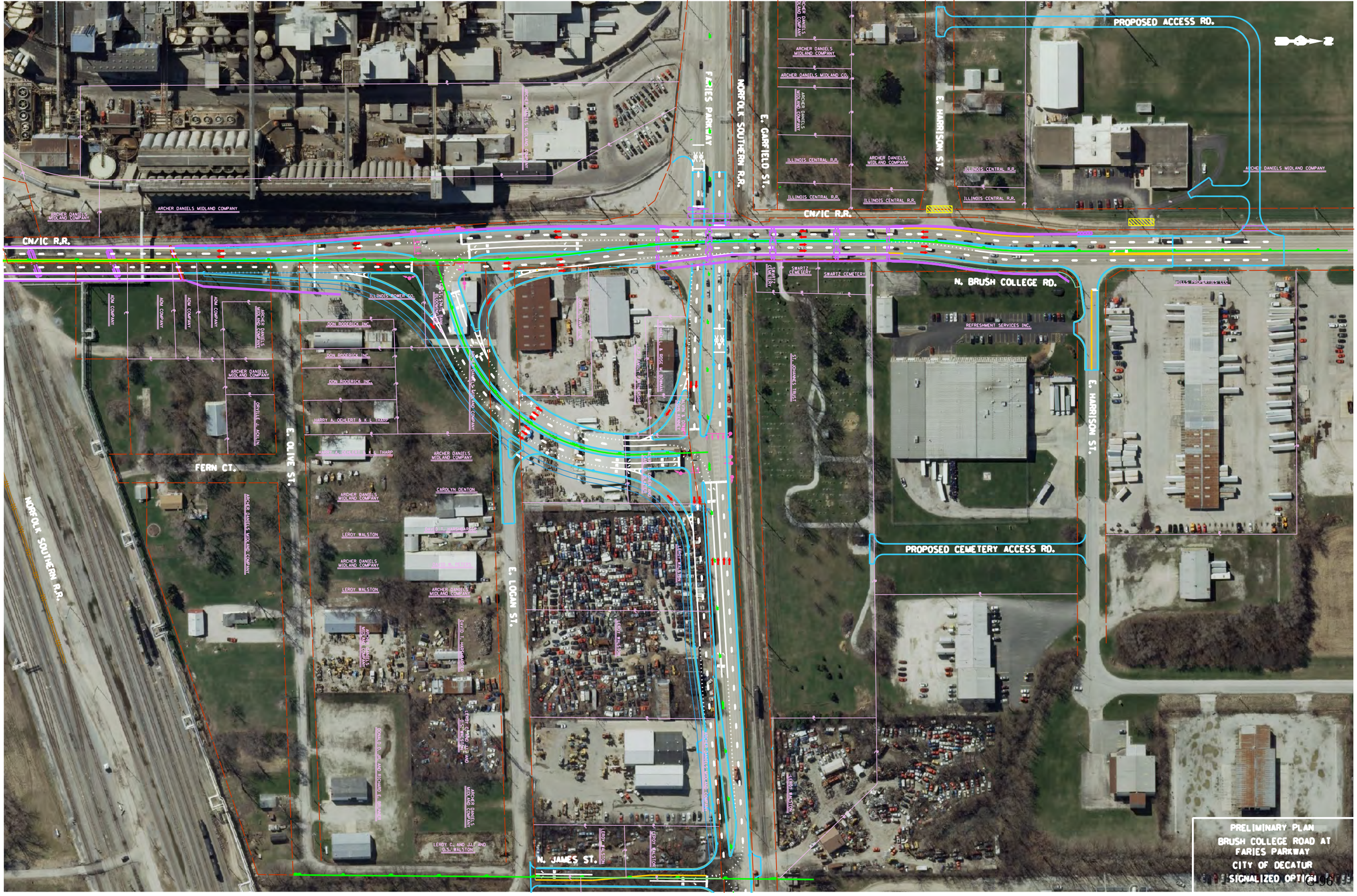

PROPOSED ACCESS RD.
ARCHER DANIELS MIDLAND COMPANY
CN/IC R.R.
FARIES PARKWAY
NORFOLK SOUTHERN R.R.
E. GARFIELD ST.
E. HARRISON ST.
ILLINOIS CENTRAL R.R.
N. BRUSH COLLEGE RD.
SWARTZ CEMETERY
REFRESHMENT SERVICES, INC.
MILES PROPERTIES LLC
ADM COMPANY
ILLINOIS POWER CO.
DON RODERICK INC.
HARRY A. OEHLERT & K. L. THARP
FERN CT.
E. OLIVE ST.
E. LOGAN ST.
CAROLYN DENTON
LEROY WALSTON
DAVID T. HARSHBARGER
DONALD D. JR AND RICHARD E. BRUNER
LEROY C. AND JEANNE D.S. WALSTON
N. JAMES ST.
PROPOSED CEMETERY ACCESS RD.
PRELIMINARY PLAN
BRUSH COLLEGE ROAD AT FARIES PARKWAY
CITY OF DECATUR
SIGNALIZED OPTION

Exhibit J

Preliminary Type, Size and Location Drawing

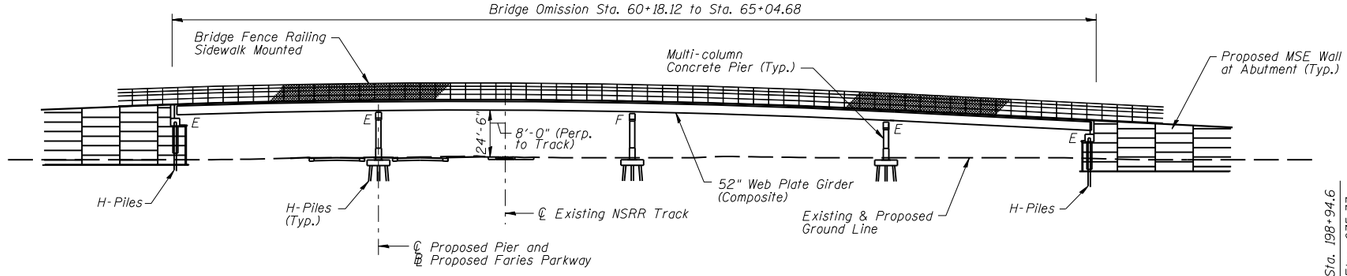
Brush College Road over

Faries Parkway and NS Track

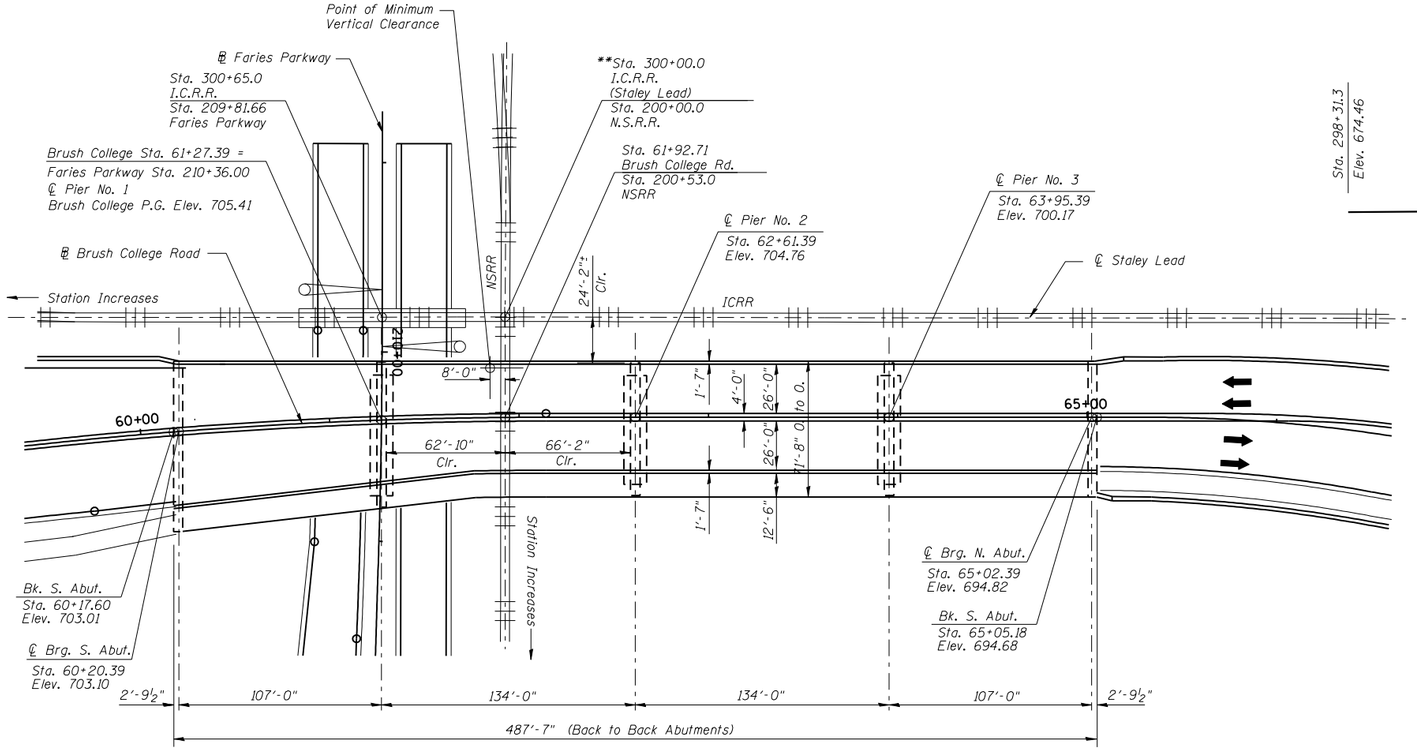
Existing Structure:
None

Benchmark:
"M" in Mueller on fire hydrant at Southeast corner of Cerro Gordo St. and Brush College Rd. - Elev. 652.58.

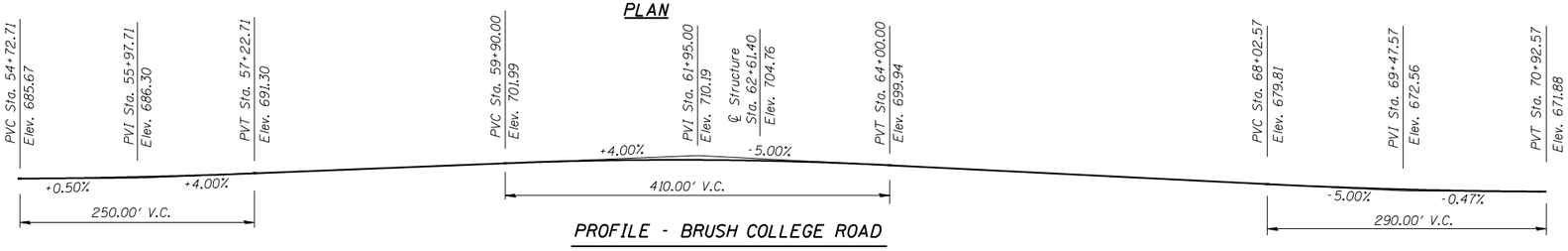
Road will be closed during construction.



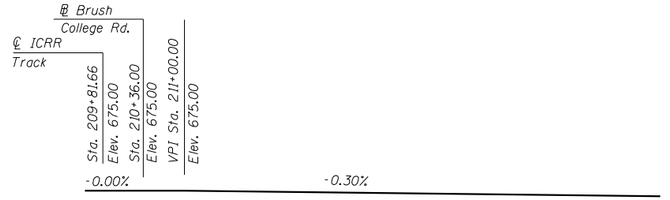
ELEVATION



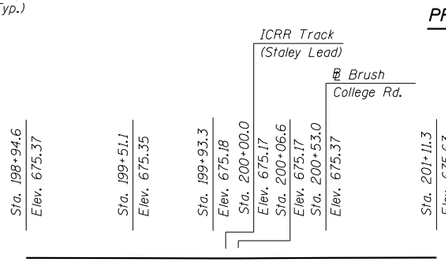
PLAN



PROFILE - BRUSH COLLEGE ROAD

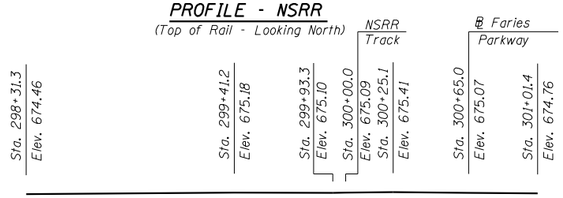


PROFILE - FARIES PARKWAY



PROFILE - NSRR

(Top of Rail - Looking North)



PROFILE - ICRR

(Top of Rail - Looking East)

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications

LOADING HL 93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

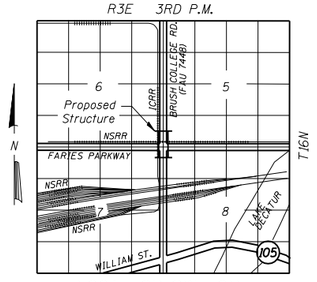
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (Structural Steel AASHTO M270 Grade 50W)

HIGHWAY CLASSIFICATION

F.A.U. Rte. 7448 - Brush College Road
Functional Class: Urban Minor Arterial
ADT: 13,900 (2010), 18,950 (2035)
Directional Split: 50:50
ADTT: 9.0%
DHV: 1900 (2035)
Design Speed: 40 m.p.h.
Posted Speed: 35 m.p.h.
Two-Way Traffic

SEISMIC DATA

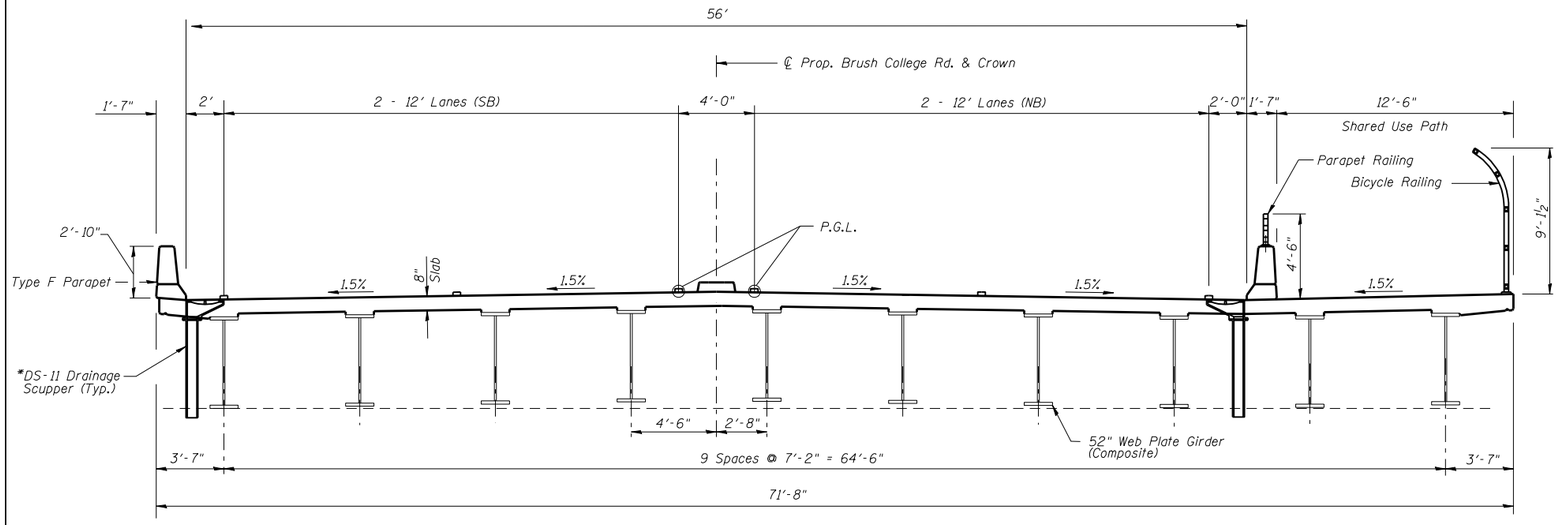
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.111g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.210g
Soil Site Class = C



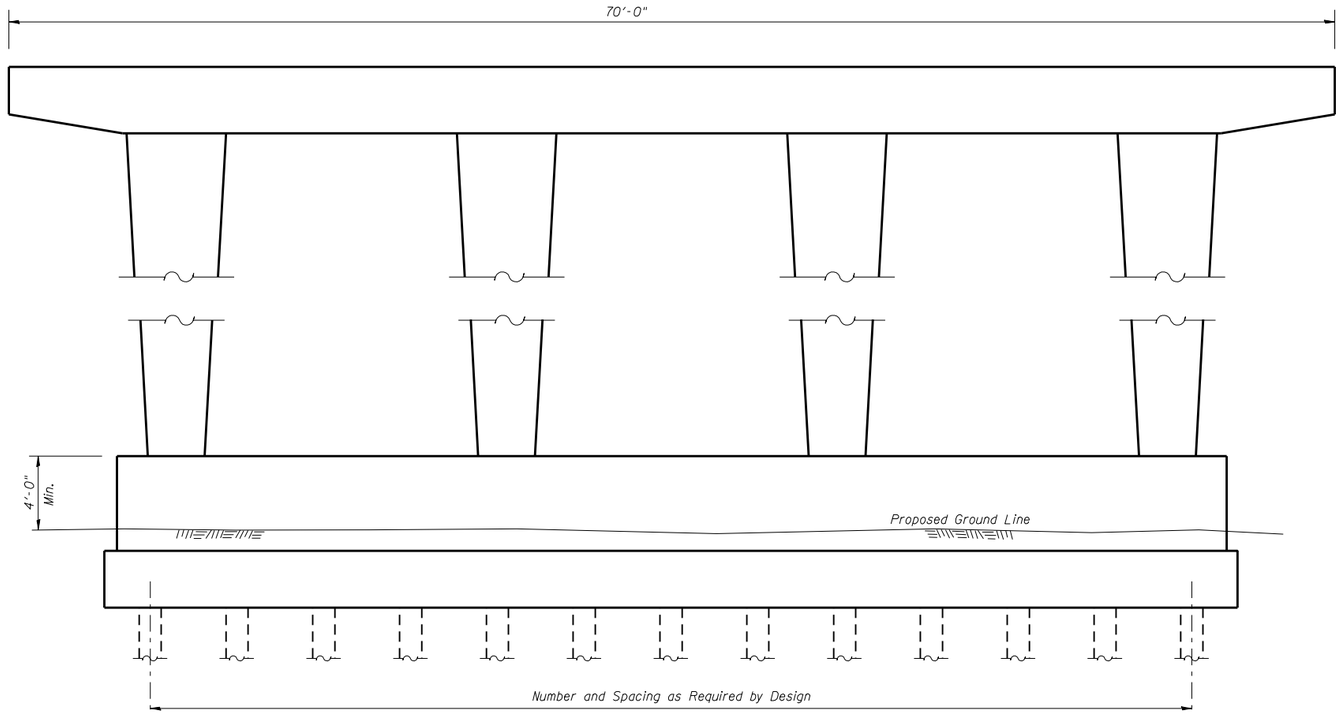
LOCATION SKETCH

GENERAL PLAN
FAU 7448 (BRUSH COLLEGE ROAD) OVER FARIES PARKWAY
SECTION
CITY OF DECATUR
MACON COUNTY
STATION 61+27.39
STRUCTURE NO.

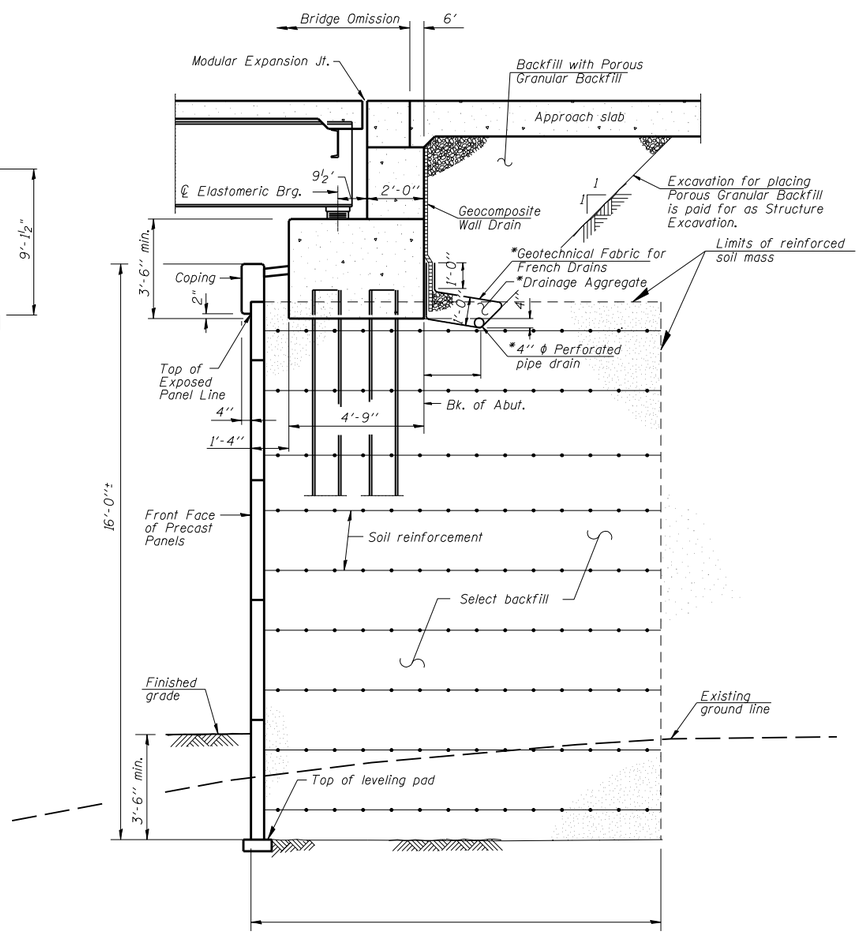
FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN STRUCTURE NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			7448	09-00933-00-BR	MACON		
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -					CONTRACT NO.		
	PLOT DATE = $DATE$	DATE -	REVISED -		SCALE: SHEET NO. 1 OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		



PROPOSED CROSS-SECTION



ELEVATION - PROPOSED PIER



SECTION THRU ABUTMENT

* No freefall deck drains will be permitted in the spans over the tracks or within 10 ft. of cross arms of a railroad pole line.

GENERAL PLAN
FAU 7448 (BRUSH COLLEGE ROAD)
OVER FARIES PARKWAY
SECTION XX-XXXXX-XX-XX
CITY OF DECATUR
MACON COUNTY
STATION 62+61.39
STRUCTURE NO. XX-XXXX

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO.

SCALE: | SHEET NO. 2 OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7448		MACON		
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

Norfolk Southern Corporation
1200 Peachtree Street, N.E.
Atlanta, Georgia 30309-3579
404/529-1408
Fax: 404/527-2589

J. N. Carter, Jr.
Chief Engineer
Bridges and Structures

James R. Kazmierczak
Engineer - Public Improvements
Phone: 404/529-1256
Fax: 404/527-2769
E-mail james.kazmierczak
@nscorp.com

Re: Decatur, IL Brush New College Road Bridge over NS
Illinois Division Milepost D-372.9

July 18, 2012
File #BR0020452

Keith W. Benting, P.E., S.E.
Group Manager – Structures
URS Corporation
345 East Ash Ave.
Decatur, IL 62526

Dear Mr. Benting:

This office and Norfolk Southern's contract engineering firm for this project, Jacobs Engineering, have reviewed the Concept Plans dated May 25, 2012. Attached is a copy of Jacobs' review comments dated July 17, 2012, with which I am in agreement.

The Concept Plans are acceptable subject to resolution of Jacobs' comments. Please forward detailed plans for review when they become available.

Please contact me at (404)529-1256 should you have any questions.

Sincerely,

James R. Kazmierczak
Engineer -
Public Improvements

Cy:

Howard Swanson

NEW BRUSH COLLEGE ROAD BRIDGE
OVER NS
CONCEPT PLANS
DECATUR, ILLINOIS

JOB NAME:	FAU 7448 BRUSH COLLEGE RO MACON COUNTY DECATUR, ILLINOIS	SUBMITTAL:	05-25-12
COMMENTS BY:	T.C. Heinrich	DISCIPLINE:	Structures
REVIEWED BY:	D. R. Ladner	DATE:	07-17-12
PROJECT MANAGER:	D. R. Ladner		
RESPONDED BY:		DATE:	
CHECKED BY:		DATE:	

ITEM NO.	SHEET/ CALC	COMMENT	Status
1	Exhibit A	Plan view indicates that minimum horizontal clearance to be provided from face of pier to centerline of the nearest track will be 29 ft. No exceptions taken	Closed
2	Exhibit C	Existing roadway underpass to be filled and abandoned, with the last several feet to be low strength concrete material (flowable fill) to eliminate any voids. Existing CN span to remain, with an MSE retaining wall to be constructed to separate the CN span from the roadway. Provide additional details as they become available.	Open
3	Exhibit D	Type, Size and Location Plan (TS&L) indicates that: Minimum vertical clearance is 25 ft. above top of rail Minimum horizontal clearance to be provided from face of pier to centerline of the nearest track is 29 ft. 1 in. No exceptions taken	Closed

ITEM NO.	SHEET/ CALC	COMMENT	Status
4	Exhibit D	Pier 3 to be located between tracks and may require a temporary crossing. Verify	Open
5	Exhibit C	Existing roadway underpass to be filled and abandoned, with the last several feet to be low strength concrete material (flowable fill) to eliminate any voids. Existing CN span to remain, with an MSE retaining wall to be constructed to separate the CN span from the roadway. Provide additional details as they become available.	Open
6	Exhibit D	Type, Size and Location Plan (TS&L) indicates that: • Minimum vertical clearance is 25 ft. above top of rail • Minimum horizontal clearance to be provided from face of pier to centerline of the nearest track is 29 ft. 1 in. No exceptions taken	Closed
7	Exhibit E	Utility corridor to be constructed east of the proposed bridge. Utility applications to be coordinated with DMJM HARRIS 260 South Broad Street Suite 1500 Philadelphia, PA 19102 Attention: NS Pipe and Wire Administrator Telephone: (215) 735-0832 E-Mail: NSUtilities@dmjmharris.com	Open
8	Exhibit G	Line of site survey prepared indicates that an 1,100 ft. preview of the existing signals will be provided after construction of the new overhead briadge. NS C&S Department has indicated that the preview is acceptable based on trains stopping to re-crew in the yard.	Closed

9	Exhibit J	Brush College Road over NS and Faries Parkway TS&L indicates: • Minimum vertical clearance is 24 ft. 6 in. above top of rail • Minimum horizontal clearance to be provided from face of pier to centerline of the nearest track is 62 ft. 10 in.	Closed
10	Exhibit J	Distance from edge of pavement to centerline of track not shown. Please provide. Proposed grade crossing warning devices for CN track to be located adjacent to NS track. Please provide distance from centerline of track to signal.	Open

Benting, Keith

From: Benting, Keith
Sent: Wednesday, December 19, 2012 4:20 PM
To: James Kazmierczak (james.kazmierczak@nscorp.com)
Cc: 'keith.keeton@nscorp.com'; 'joel.novick@nscorp.com'; 'matthew.davidson@nscorp.com'; Howard Swanson (howard.swanson@nscorp.com); Mary E Cave "Cave, Mary E" "Cave, Mary E" <MCave@decaturil.gov> (MCave@decaturil.gov); Skelley, Daniel
Subject: Decatur, IL - Brush College Road Improvement Study - Proposed Overpass at NS yard - Illinois Division Milepost D-372.9
Attachments: Transmittal Letter 12-19-12.doc; Response to Comments 12-19-12.docx; 071712 Brush College Rd Concept Plan Review Comments .doc; TS&L Faries 12-19-12.pdf; Aerial_Plan_Constr 12-19-12.pdf

Jim,

Attached is some additional information regarding the proposed overpass at the NS yard in Decatur, IL.

Keith W. Benting, P.E., S.E.
Group Manager – Structures
URS Corporation
345 East Ash Ave.
Decatur, IL 62526
Phone: (217) 875-4800
FAX: (217) 875-3577
Email: keith.benting@urs.com

URS

December 19, 2012

James R. Kazmierczak
Engineer – Public Improvements
Norfolk Southern Corporation
1200 Peachtree Street, N.E.
Atlanta, GA 30309-3579

Re: Decatur, IL – Brush College Road Bridge over NS
Illinois Division Milepost D-372.9

Dear Mr. Kazmierczak:

Enclosed is additional information in response to review comments dated 7-17-12.

Sincerely,
URS Corporation

Keith W. Benting

Keith W. Benting, PE, SE
Project Manager

URS Corporation
345 East Ash Avenue, Suite B
Decatur, IL 62526
Tel: 217.875.4800
Fax: 217.875.3577
www.urscorp.com

Proposed Structure to Carry Brush College Road over NS Rail Yard – Decatur, IL

References (attached):

1) Review comments dated 7-17-12.
2) General Plan of TS&L Drawing
3) Aerial View showing one potential construction scheme for overpass at NS rail yard

Item No. 2 & 5:

Additional details will be provided during the final design phase.

Item No. 4:

The construction of Pier 3, located between the tracks will require a temporary crossing. Although we do not know how the selected contractor will propose to do the work, access might only be required from the north. Access to the center area of the yard will be required to construct Pier 3, to fill in the gap between the existing underpasses, and to set the girders over the yard tracks.

Item No. 7:

Information was sent to DMJM Harris regarding the proposed utility corridor. They provided guidance for future submittals regarding jacking and boring under the tracks.

Item No. 10:

The distance from the edge of pavement to the centerline of track and the distance from the centerline of track to the crossing signal have been added to the attached General Plan of the Type, Size, & Location drawing for the proposed overpass at Faries Parkway.

We understand that the yard is the largest flat switching yard in North America and that multiple movements occur. We were told that every track on the bridge is used once an hour. URS has had discussions with contractors regarding the constructability of the overpass at the NS rail yard. We are hopeful that provisions can be made to set the steel over the tracks in the yard.

Attached is an aerial plan showing a sequence proposed by one contractor. The current plan is to construct the overpass in two stages so that traffic can be maintained on Brush College Road. The first stage (girder lines shown in red) would involve construction of the eastern portion of the overpass. We estimate that six girder lines will be constructed in stage I. The second stage (girder lines shown in blue) would require the placement of four girder lines. The proposed sequence would place girder sections starting at the south abutment to include the girder sections over Pier 2. Construction would than move to the north abutment and progress to the south to include the girder sections over Pier 4.

Temporary bents would be constructed on each side of Pier 3 in order to support the girder section over that pier. We understand that the temporary bents will need to be positioned so that they do not prohibit vehicular movement within the yard. The bents will also need to be placed to avoid any yard utilities. When the section of girder is set over Pier 3, the only remaining section of girders to be placed will be over the yard tracks to the south and to the north. Although the contractor would prefer to set all six girders over the south tracks in a single day, we understand that yard operations must be maintained.

At a project meeting with Norfolk Southern on 11/4/2010, the Senior Trainmaster said that there were plans to install a switch at the east end of the yard. He said that if the switch was installed, the westbound (north) tracks could potentially be taken out of service temporarily. Has the construction of the switch been completed so that the westbound tracks could be taken out of service to set the girders? If not, can windows be provided to set the girders over the north tracks? Can windows be provided to set the girders over the south tracks?

NEW BRUSH COLLEGE ROAD BRIDGE
OVER NS
CONCEPT PLANS
DECATUR, ILLINOIS

JOB NAME:	FAU 7448 BRUSH COLLEGE RO MACON COUNTY DECATUR, ILLINOIS	SUBMITTAL:	05-25-12
COMMENTS BY:	T.C. Heinrich	DISCIPLINE:	Structures
REVIEWED BY:	D. R. Ladner	DATE:	07-17-12
PROJECT MANAGER:	D. R. Ladner		
RESPONDED BY:		DATE:	
CHECKED BY:		DATE:	

ITEM NO.	SHEET/ CALC	COMMENT	Status
1	Exhibit A	Plan view indicates that minimum horizontal clearance to be provided from face of pier to centerline of the nearest track will be 29 ft. No exceptions taken	Closed
2	Exhibit C	Existing roadway underpass to be filled and abandoned, with the last several feet to be low strength concrete material (flowable fill) to eliminate any voids. Existing CN span to remain, with an MSE retaining wall to be constructed to separate the CN span from the roadway. Provide additional details as they become available.	Open
3	Exhibit D	Type, Size and Location Plan (TS&L) indicates that: Minimum vertical clearance is 25 ft. above top of rail Minimum horizontal clearance to be provided from face of pier to centerline of the nearest track is 29 ft. 1 in. No exceptions taken	Closed

ITEM NO.	SHEET/ CALC	COMMENT	Status
4	Exhibit D	Pier 3 to be located between tracks and may require a temporary crossing. Verify	Open
5	Exhibit C	Existing roadway underpass to be filled and abandoned, with the last several feet to be low strength concrete material (flowable fill) to eliminate any voids. Existing CN span to remain, with an MSE retaining wall to be constructed to separate the CN span from the roadway. Provide additional details as they become available.	Open
6	Exhibit D	Type, Size and Location Plan (TS&L) indicates that: • Minimum vertical clearance is 25 ft. above top of rail • Minimum horizontal clearance to be provided from face of pier to centerline of the nearest track is 29 ft. 1 in. No exceptions taken	Closed
7	Exhibit E	Utility corridor to be constructed east of the proposed bridge. Utility applications to be coordinated with DMJM HARRIS 260 South Broad Street Suite 1500 Philadelphia, PA 19102 Attention: NS Pipe and Wire Administrator Telephone: (215) 735-0832 E-Mail: NSUtilities@dmjmharris.com	Open
8	Exhibit G	Line of site survey prepared indicates that an 1,100 ft. preview of the existing signals will be provided after construction of the new overhead briadge. NS C&S Department has indicated that the preview is acceptable based on trains stopping to re-crew in the yard.	Closed

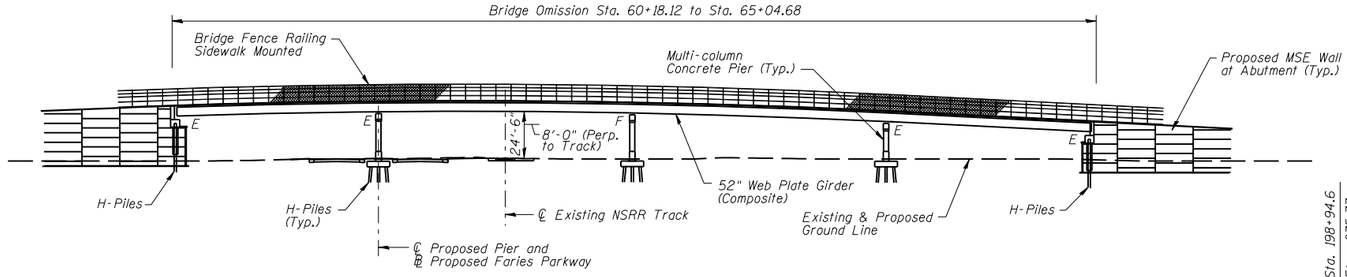
9	Exhibit J	Brush College Road over NS and Faries Parkway TS&L indicates: • Minimum vertical clearance is 24 ft. 6 in. above top of rail • Minimum horizontal clearance to be provided from face of pier to centerline of the nearest track is 62 ft. 10 in.	Closed
10	Exhibit J	Distance from edge of pavement to centerline of track not shown. Please provide. Proposed grade crossing warning devices for CN track to be located adjacent to NS track. Please provide distance from centerline of track to signal.	Open

Existing Structure:
None

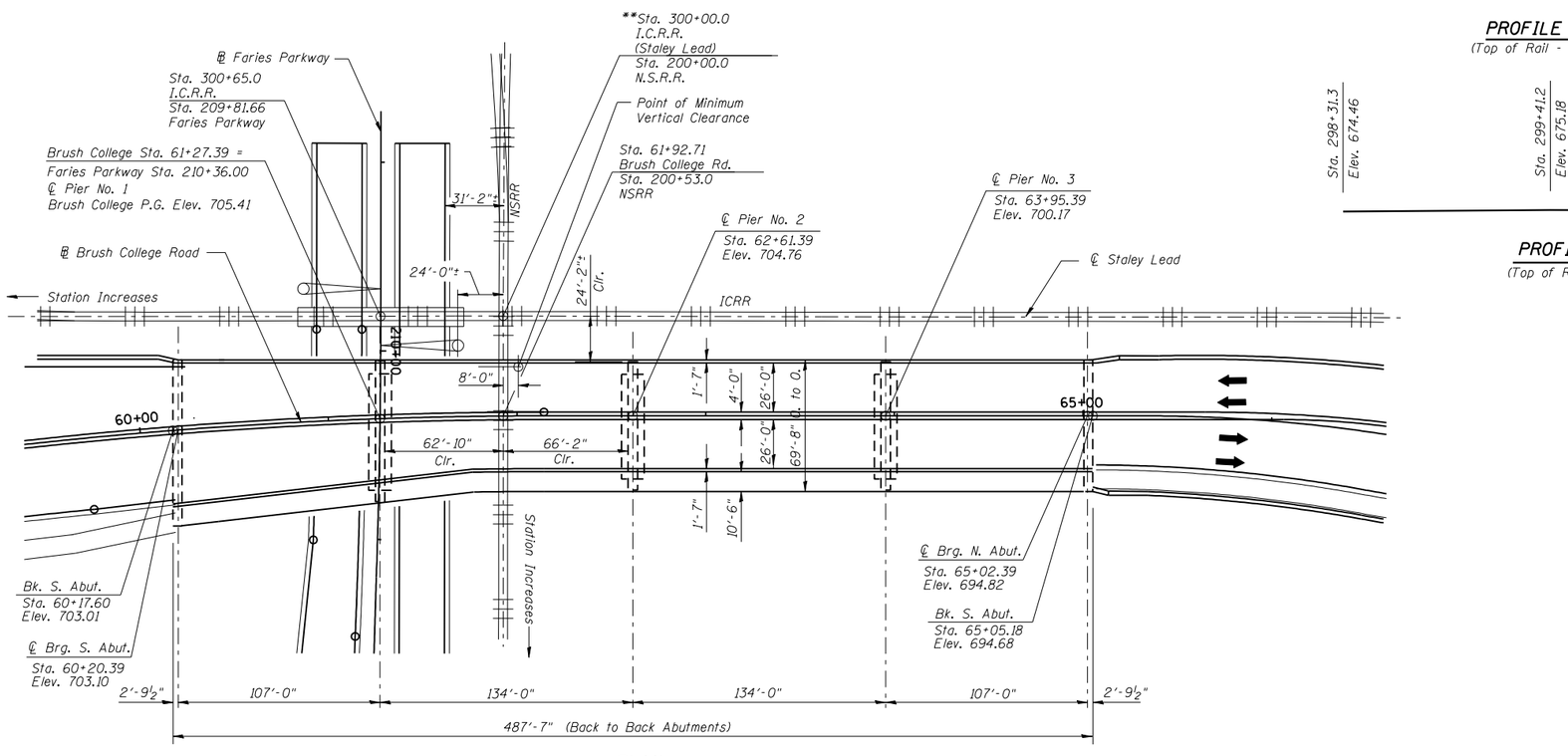
Benchmark:

"M" in Mueller on fire hydrant at Southeast corner of Cerro Gordo St. and Brush College Rd. - Elev. 652.58.

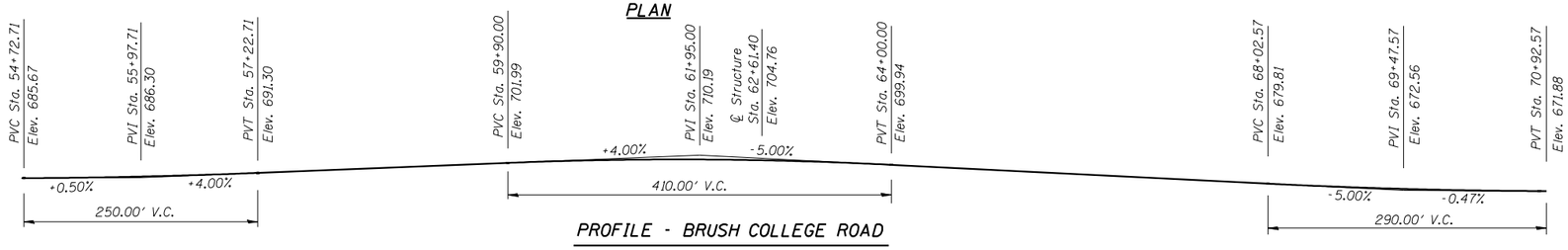
Road will be closed during construction.



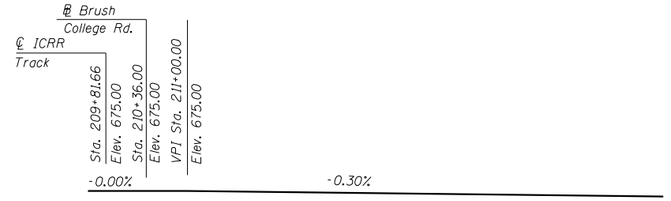
ELEVATION



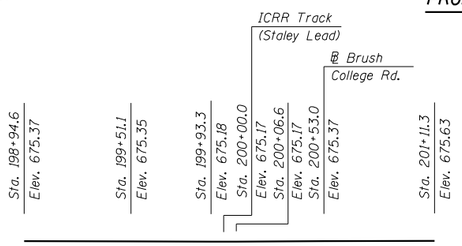
PLAN



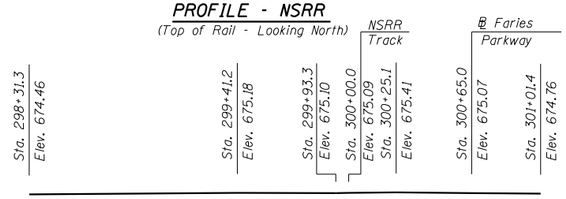
PROFILE - BRUSH COLLEGE ROAD



PROFILE - FARIES PARKWAY



PROFILE - NSRR
(Top of Rail - Looking North)



PROFILE - ICRR
(Top of Rail - Looking East)

DESIGN SPECIFICATIONS
2012 AASHTO LRFD Bridge Design Specifications

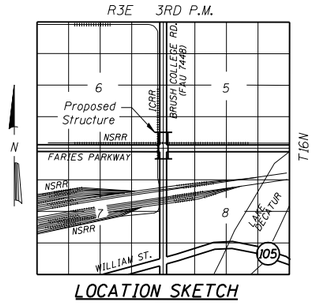
LOADING HL 93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (Structural Steel AASHTO M270 Grade 50W)

HIGHWAY CLASSIFICATION
F.A.U. Rte. 7448 - Brush College Road
Functional Class: Urban Minor Arterial
ADT: 13,900 (2010), 18,950 (2035)
Directional Split: 50:50
ADTT: 9.0%
DHV: 1900 (2035)
Design Speed: 40 m.p.h.
Posted Speed: 35 m.p.h.
Two-Way Traffic

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.111g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.210g
Soil Site Class = C



LOCATION SKETCH

GENERAL PLAN
FAU 7448 (BRUSH COLLEGE ROAD) OVER FARIES PARKWAY
SECTION
CITY OF DECATUR
MACON COUNTY
STATION 61+27.39
STRUCTURE NO.

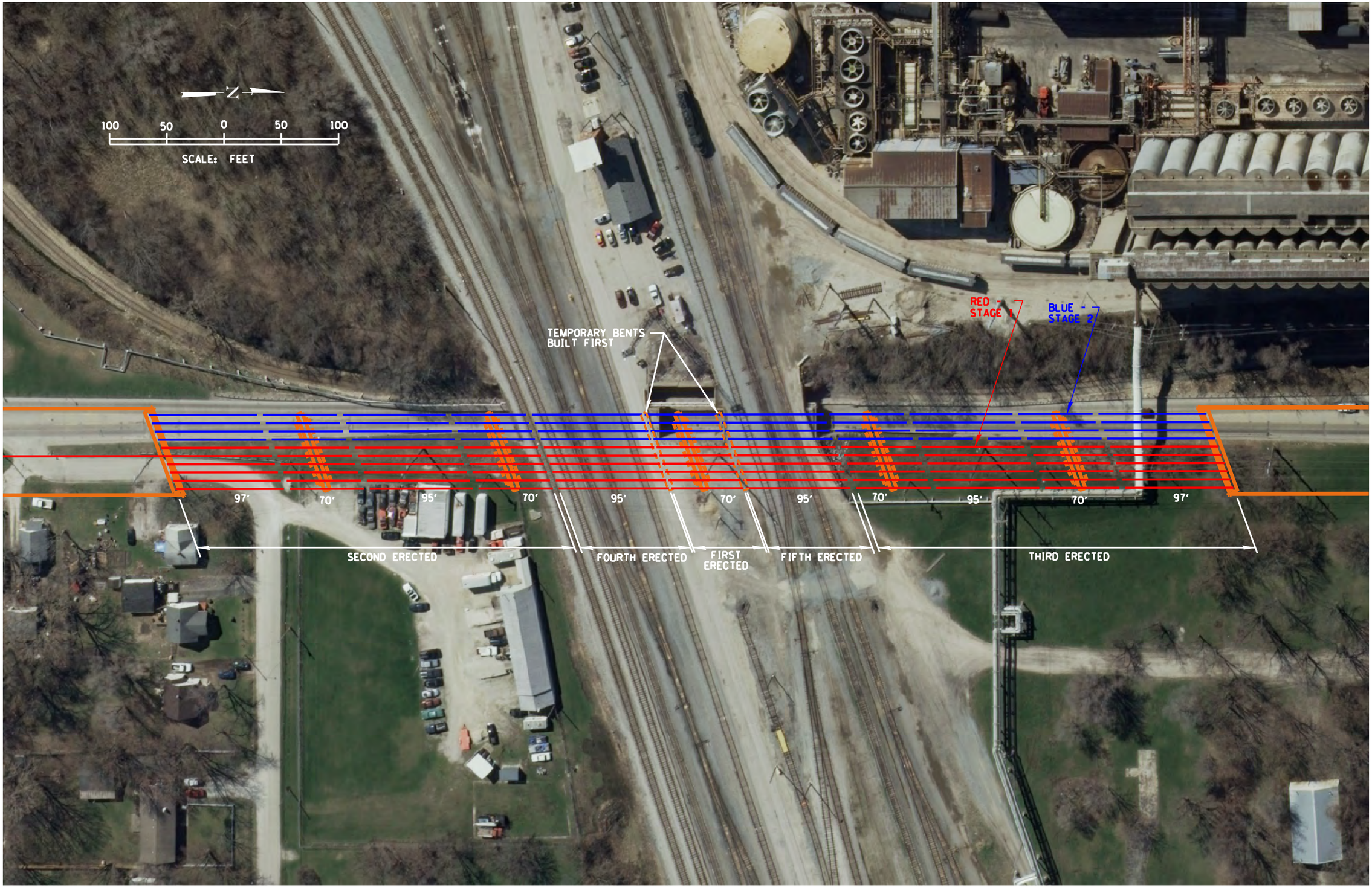
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
STRUCTURE NO.

SCALE: | SHEET NO. 1 OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7448	09-00933-00-BR	MACON		
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			


N
100 50 0 50 100
SCALE: FEET
TEMPORARY BENTS BUILT FIRST
RED - STAGE 1
BLUE - STAGE 2
97'
70'
95'
70'
95'
70'
95'
70'
95'
70'
97'
SECOND ERECTED
FOURTH ERECTED
FIRST ERECTED
FIFTH ERECTED
THIRD ERECTED

URS

Record of Conversation

Date: May 16, 2013 **Time:** 10:05 am

Project: Brush College Road at Norfolk Southern Crossing Study/ 36432772

Client: City of Decatur

Recorded By: Keith W. Benting

Talked With: Ian Krispin – Norfolk Southern RR

Subject: Track outages for setting girders in NS Rail Yard

Today I received a call from Ian Krispin at Norfolk Southern. Ian has replaced Howard Swanson who was the Assistant Division Engineer – Bridges. Howard has been transferred to a position in Virginia. Ian was following up to answer my question about getting track outage time in the rail yard to set girders.

Ian said that it will be difficult, but track outage time can be obtained to set the girders. He said for planning purposes that we should assume that only one girder a day will be set over the tracks. He also said that since the work is being done in a rail yard, the flagman will have to place derails on all of the tracks before any work can be done. This alone may take 20 minutes.

When preparing the specifications, we should let the Contractor know that Norfolk Southern would like a 2-week notice before the track time is required. They will need to review the pick points for the girders, crane locations and other details of the proposed erection procedure.

URS

September 18, 2013

Mr. Roger Driskell, P.E.
Deputy Director of Highways
Region Four Engineer
Illinois Department of Transportation
400 West Wabash
Effingham, Illinois 62401

Attention: Maureen Kastl, P.E.
Local Roads Engineer

Re: **TS&Ls, Structure Geotechnical Reports, and BCRs**
Existing SN 058-3013 & 3014
Proposed SN 058-9202 & 058-9203
City of Decatur
Brush College Road Improvement Study
Section 09-00933-00-BR
NS Milepost D-372.9

Dear Maureen:

Enclosed are five (5) copies of the following:

1) TS&L – SN 058-9203 – Brush College Road over NSRR Yard
2) BLR 10210 with attachments for SN 058-9203
3) SGR – Brush College Road over NSRR Yard
4) TS&L – SN 058-9202 – Brush College Road over Faries Parkway
5) BLR 10210 with attachments for SN 058-9202
6) SGR – Brush College Road over Faries Parkway
7) BCR for SN 058-3013
8) BCR for SN 058-3014

TS&Ls for six (6) MSE retaining wall structures are under development and will be submitted when preliminary drainage calculations are completed so that the information can be included on the TS&Ls.

The final public hearing for the Brush College Road Improvement Study cannot be held until the TS&Ls are approved. Please feel free to contact me if you have any questions.

URS Corporation
345 E. Ash Avenue
Suite B
Decatur, IL 62526
Tel: 217.875.4800
Fax: 217.875.3577

URS

Sincerely,

URS Corporation

Keith W. Benting, P.E., S.E.
Project Manager

Enclosure
KWB/kwb 36432772

S:\36432772\Communications\TSL-1 Transmittal 9.18.13

cc: Mary Cave / Project Manager – City of Decatur
Daniel Parker / Engineer Public Improvements – Norfolk Southern Corporation