

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

PLANS OF LOUISVILLE SOUTHERN INDIANA OHIO RIVER BRIDGES PROJECT SECTION 4 HIGHWAY TUNNEL FINAL PRELIMINARY DESIGN SUBMITTAL

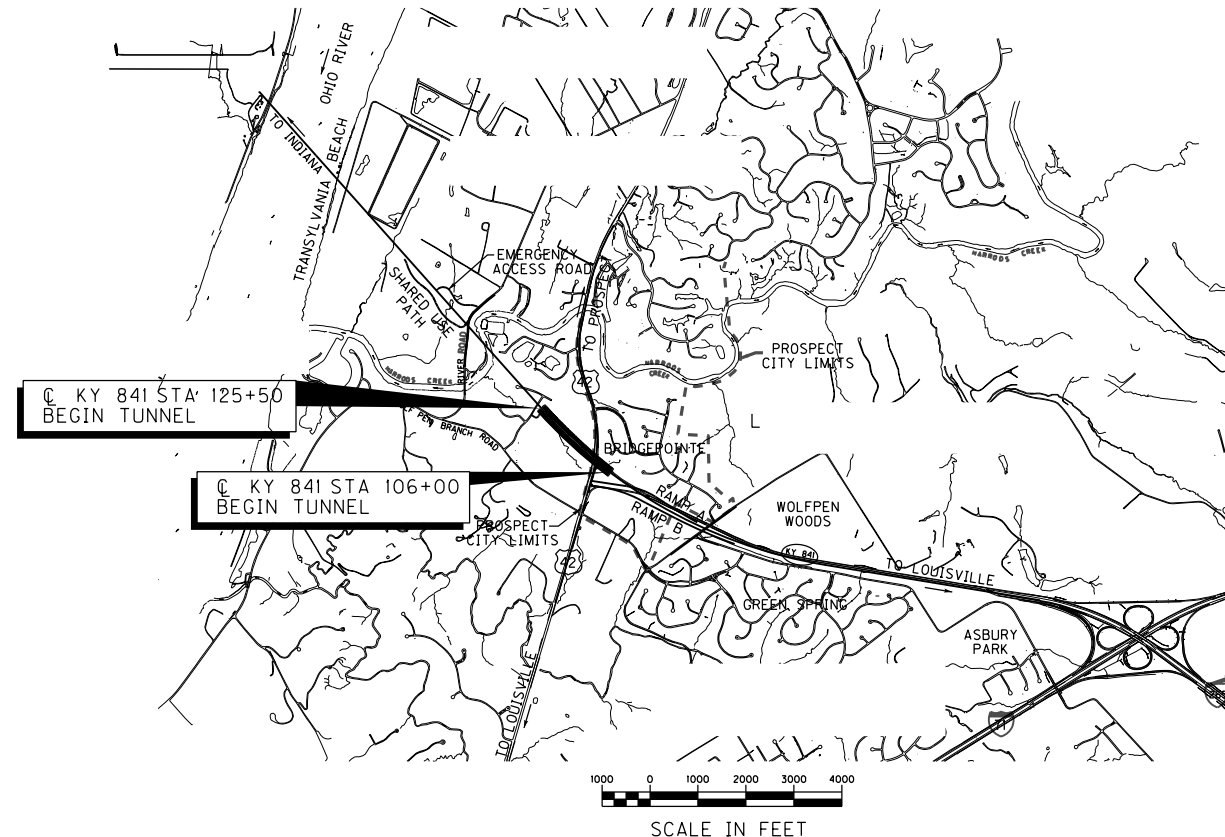


FILE NAME: T:\1865-DESIGN TUNNEL\PL&G SUBMITTAL 11-30-2011\LAYOUT SHEET.DGN

USER: jhieronymus
DATE PLOTTED: January 30, 2012

E-SHEET NAME:

MicroStation v8.11.7.180



**PRELIMINARY
SUBJECT TO CHANGE**

LAYOUT MAP

DESIGN CRITERIA

CLASS OF HIGHWAY	_____	N/A
TYPE OF TERRAIN	_____	N/A
DESIGN SPEED	_____	N/A
REQUIRED NPSD	_____	N/A
REQUIRED PSD	_____	N/A
LEVEL OF SERVICE	_____	N/A
ADT PRESENT ()	_____	N/A
ADT FUTURE ()	_____	N/A
DHV	_____	N/A
D %	_____	N/A
T %	_____	N/A

GEOGRAPHIC COORDINATES

LATITUDE 38 DEGREES 19 MINUTES 20 SECONDS NORTH
LONGITUDE 85 DEGREES 37 MINUTES 02 SECONDS WEST

DESIGNED

% RESTRICTED SD	_____	N/A
LEVEL OF SERVICE	_____	N/A
MAX. DISTANCE W/O PASSING	_____	N/A

LENGTH 1950' LIN. FT. 0.369 MILES
 FOR EQUALITIES _____ LIN. FT.
 NOT INCLUDED
 RAILROAD CROSSINGS NO. _____ LIN. FT.
 BRIDGES _____ LIN. FT.

**Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF**

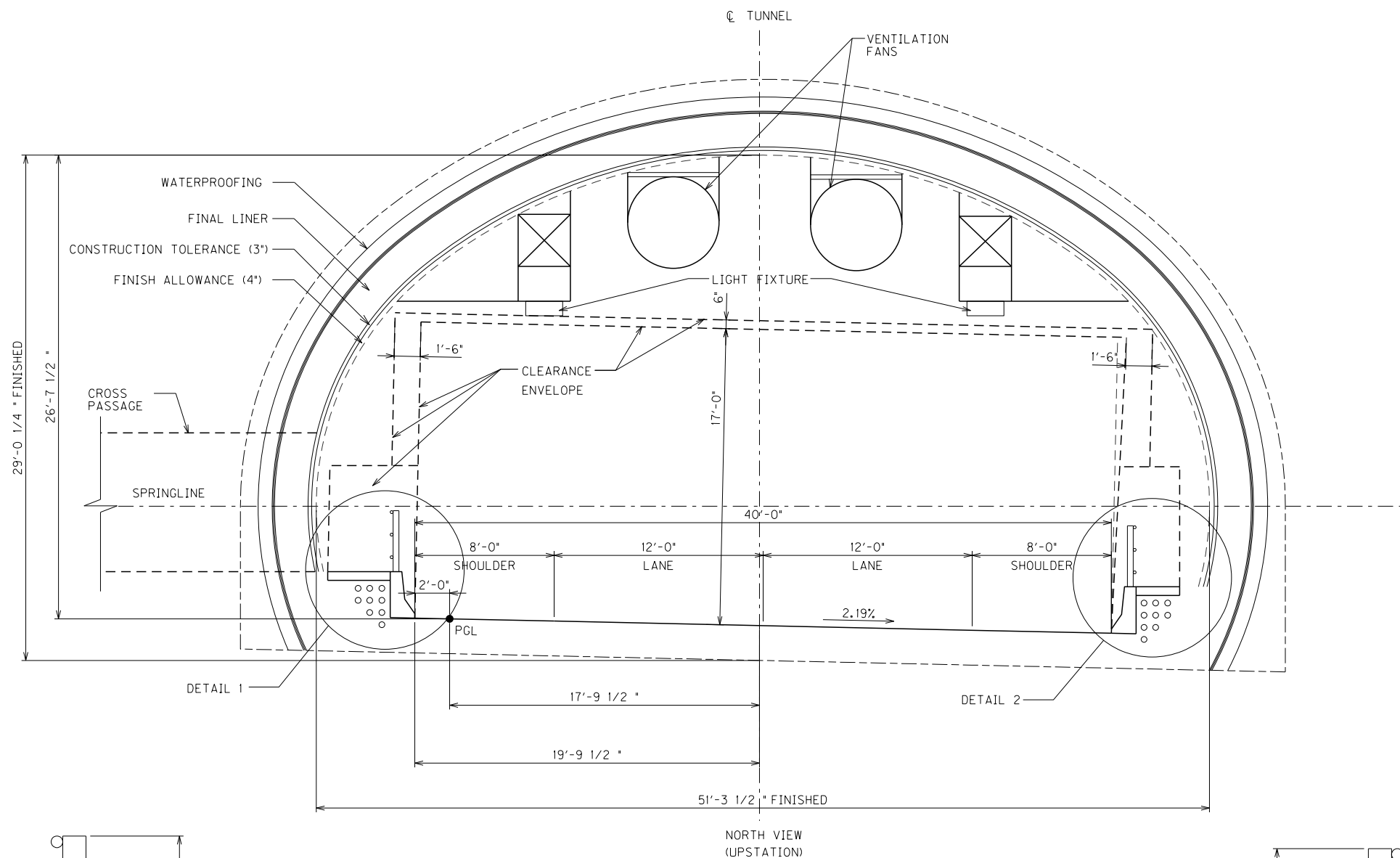
LOCHNER
ENGINEERS AND PLANNERS

ITEM NO. _____
 PROJECT NUMBER: _____
 LETTING DATE: _____
 RECOMMENDED BY: _____ PROJECT MANAGER DATE: _____
 PLAN APPROVED BY: _____ STATE HIGHWAY ENGINEER DATE: _____

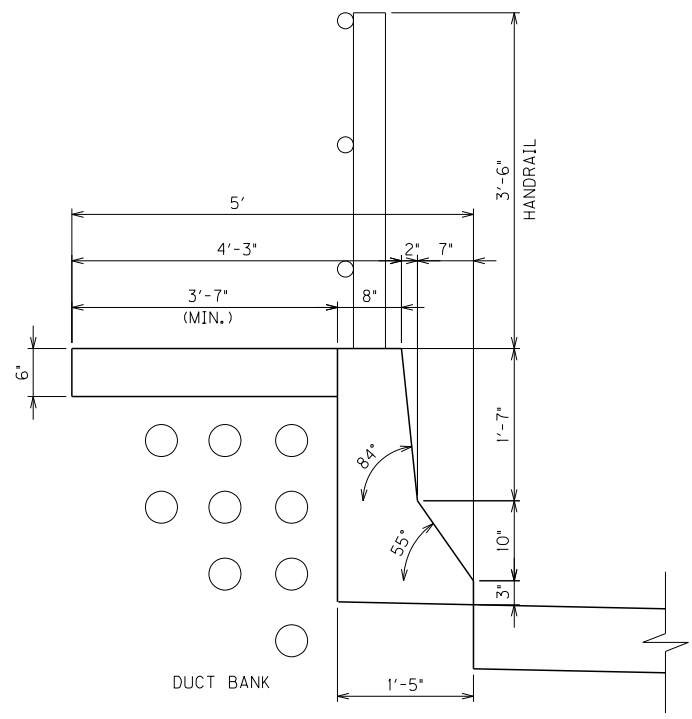
PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-001	JEFFERSON		

PROJECT NO.	26225	DESIGNED BY	Z. Col	DATE	7/19/06
DRAFTED BY	D. Javier	CHECKED BY	D. Watson	DATE	7/19/06
		APPROVED BY	R. Blanchard	DATE	7/19/06

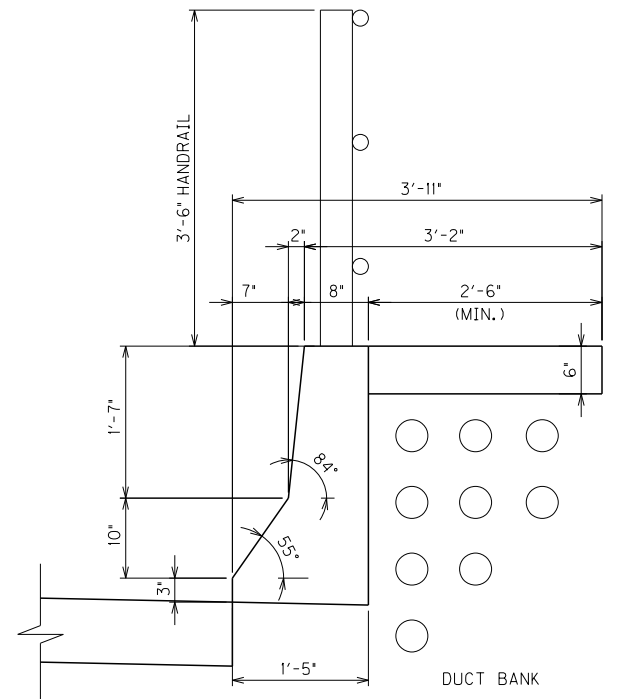


- NOTES:
- FOR TUNNEL FINAL LINING DETAILS, SEE DRAWINGS S-040 AND S-041.
 - FOR TUNNEL EXCAVATION DETAILS, SEE DRAWINGS S-015 THROUGH S-036.



DETAIL 1

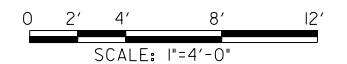
KENTUCKY BARRIER AND EMERGENCY WALKWAY



DETAIL 2

KY BARRIER AND MAINTENANCE WALKWAY

PRELIMINARY – NOT FOR CONSTRUCTION



DATE	NO.	REVISION	APPR.
	0	-	

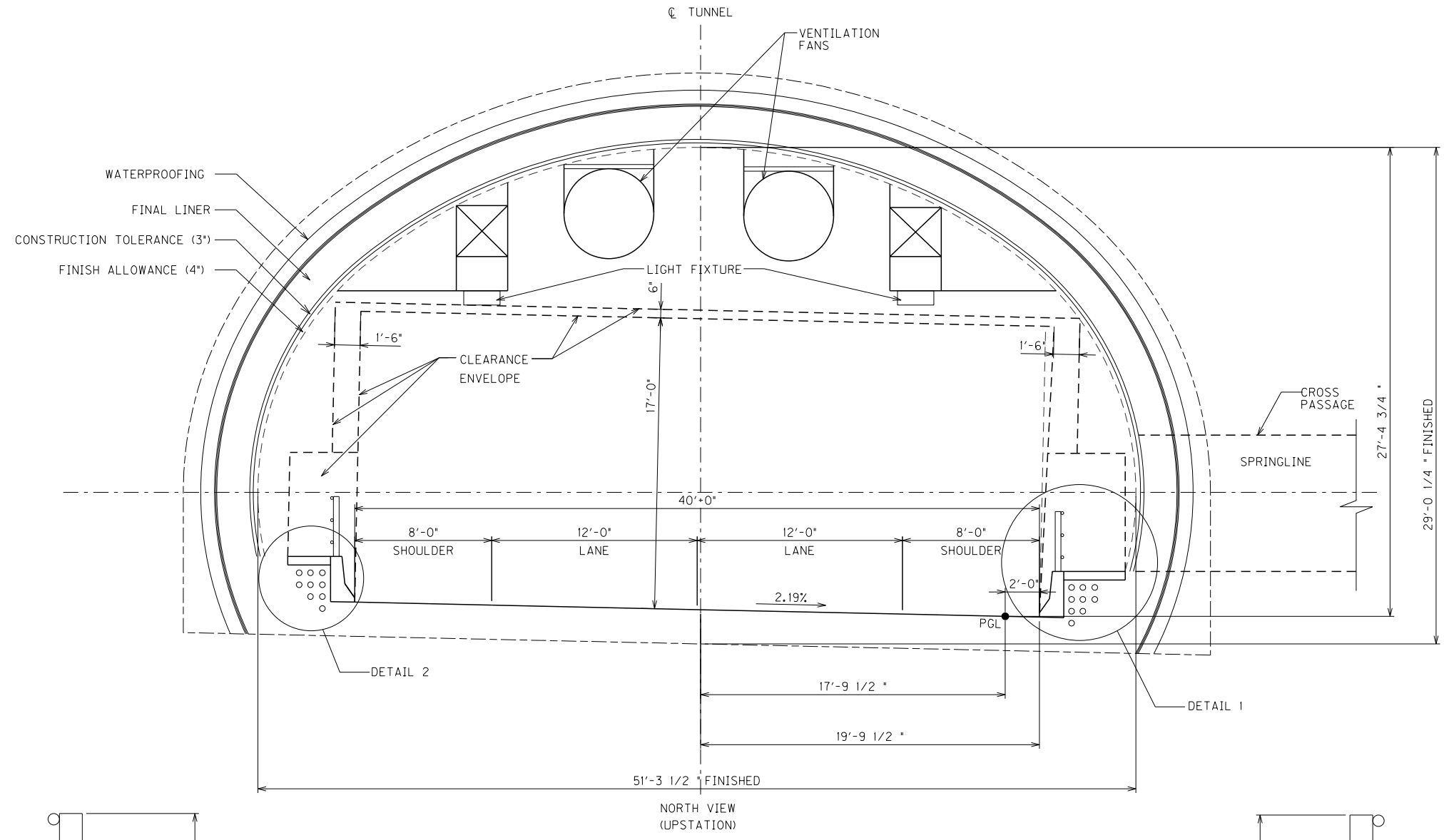
NORTHBOUND HIGHWAY TUNNEL SECTION

USER: wangjin
 DATE: 12/9/2011
 FILE NAME: C001.dgn
 DRAWING NO.: C-001

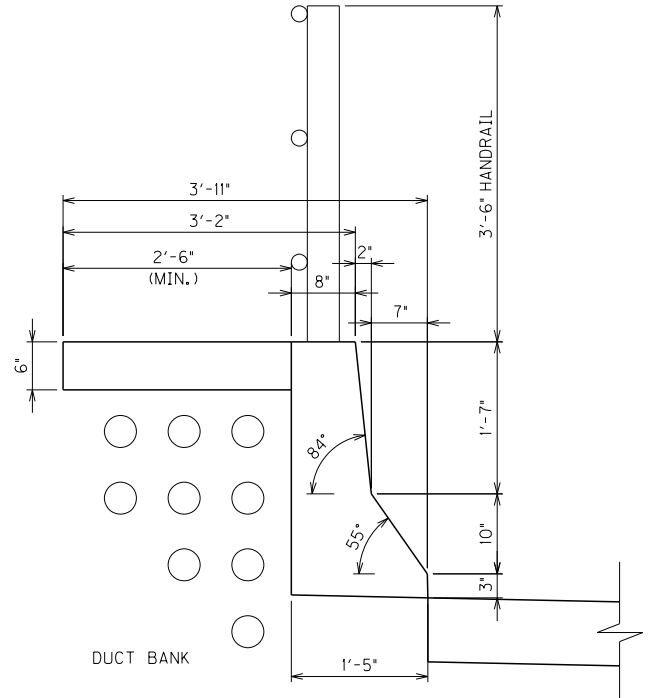
PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-002	JEFFERSON		

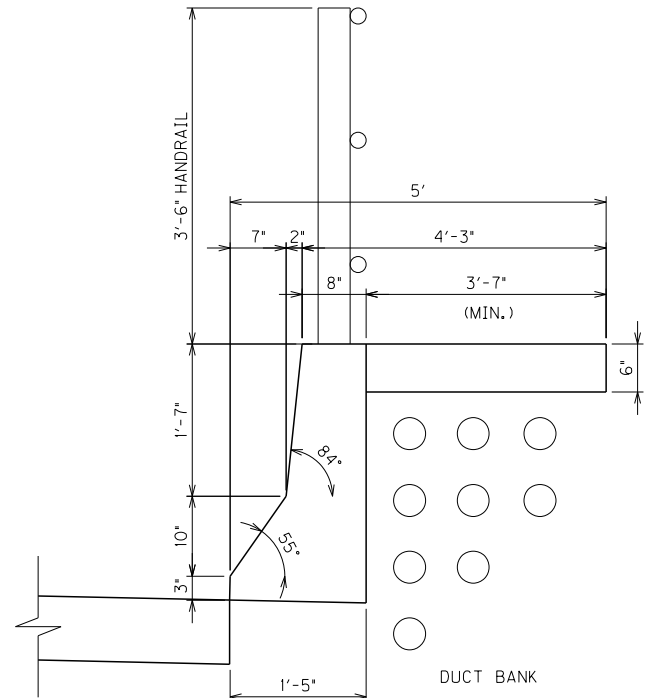
PROJECT NO. 26225
 DESIGNED BY Z. Col DATE 7/19/06
 DRAFTED BY D. Javier DATE 7/19/06
 CHECKED BY D. Watson DATE 7/19/06
 APPROVED BY R. Blanchard DATE 7/19/06



- NOTES:
- FOR TUNNEL FINAL LINING DETAILS, SEE DRAWINGS S-040 AND S-041.
 - FOR TUNNEL EXCAVATION DETAILS, SEE DRAWINGS S-015 THROUGH S-036.

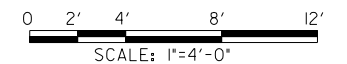


DETAIL 2
KY BARRIER AND MAINTENANCE WALKWAY



DETAIL 1
KENTUCKY BARRIER AND EMERGENCY WALKWAY

PRELIMINARY – NOT FOR CONSTRUCTION



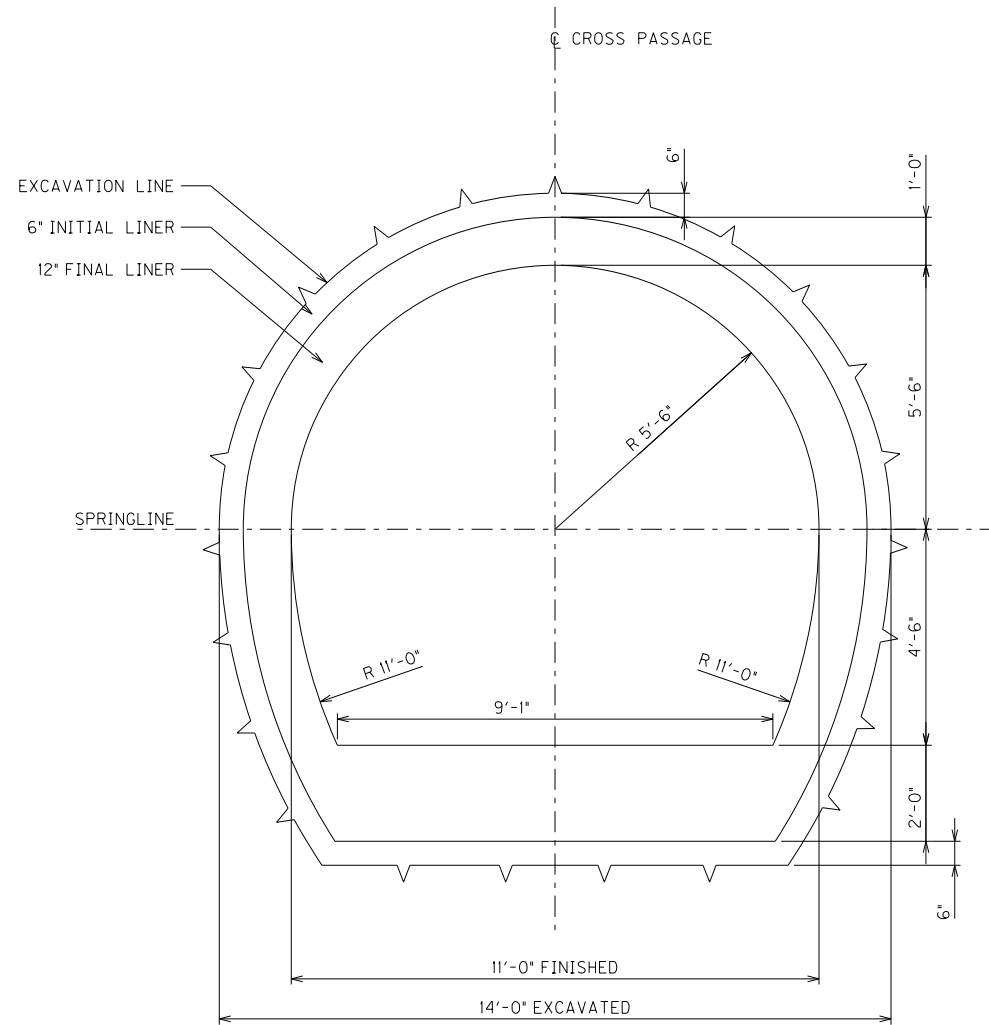
DATE	NO.	REVISION	APPR.
	0	-	

SOUTHBOUND HIGHWAY TUNNEL SECTION

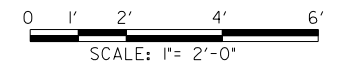
USER: wangjin
 DATE: 12/9/2011
 FILE NAME: C002.dgn
 DRAWING NO.: C-002

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-003	JEFFERSON		

PROJECT NO.	DATE	DESIGNED BY	DATE
PREPARED BY	DATE	CHECKED BY	DATE
		APPROVED BY	DATE



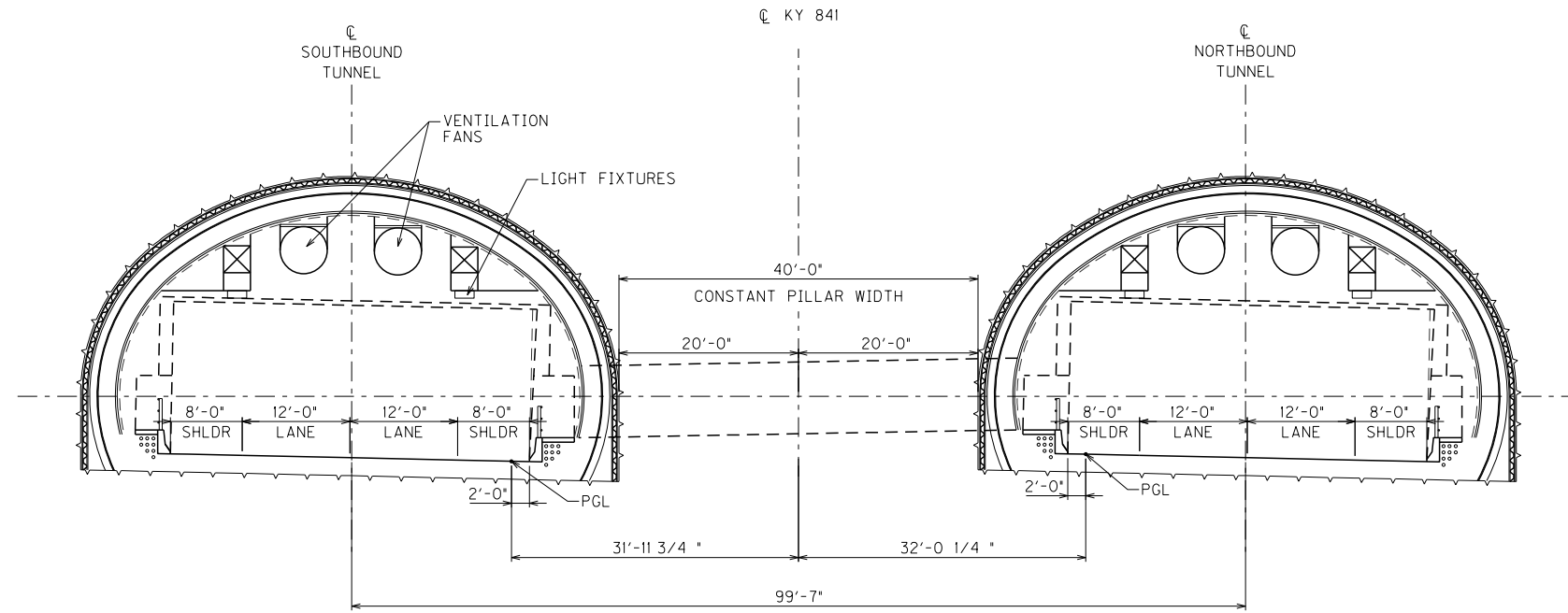
PRELIMINARY – NOT FOR CONSTRUCTION



DATE	NO.	REVISION	APPR.
	0	-	
CROSS PASSAGE CROSS SECTION			

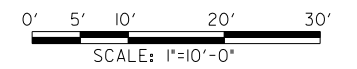
DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-004	JEFFERSON		

PROJECT NO. 26225
 DATE 5/18/06
 DESIGNED BY Z. Col
 PREPARED BY J. Smith
 CHECKED BY J. Prada
 APPROVED BY R. Blanchard
 DATE 5/18/06
 DATE 5/18/06
 DATE 5/18/06



TYPICAL TUNNEL SECTIONS

PRELIMINARY – NOT FOR CONSTRUCTION



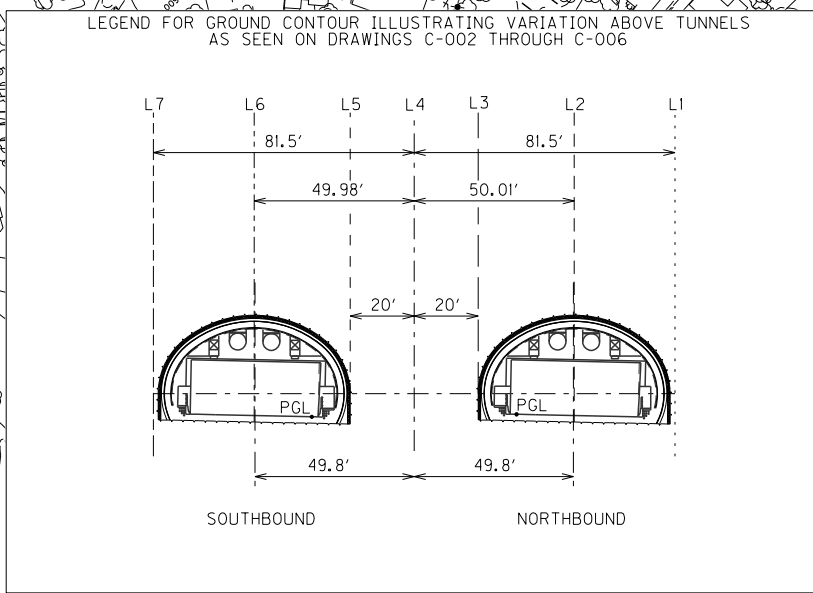
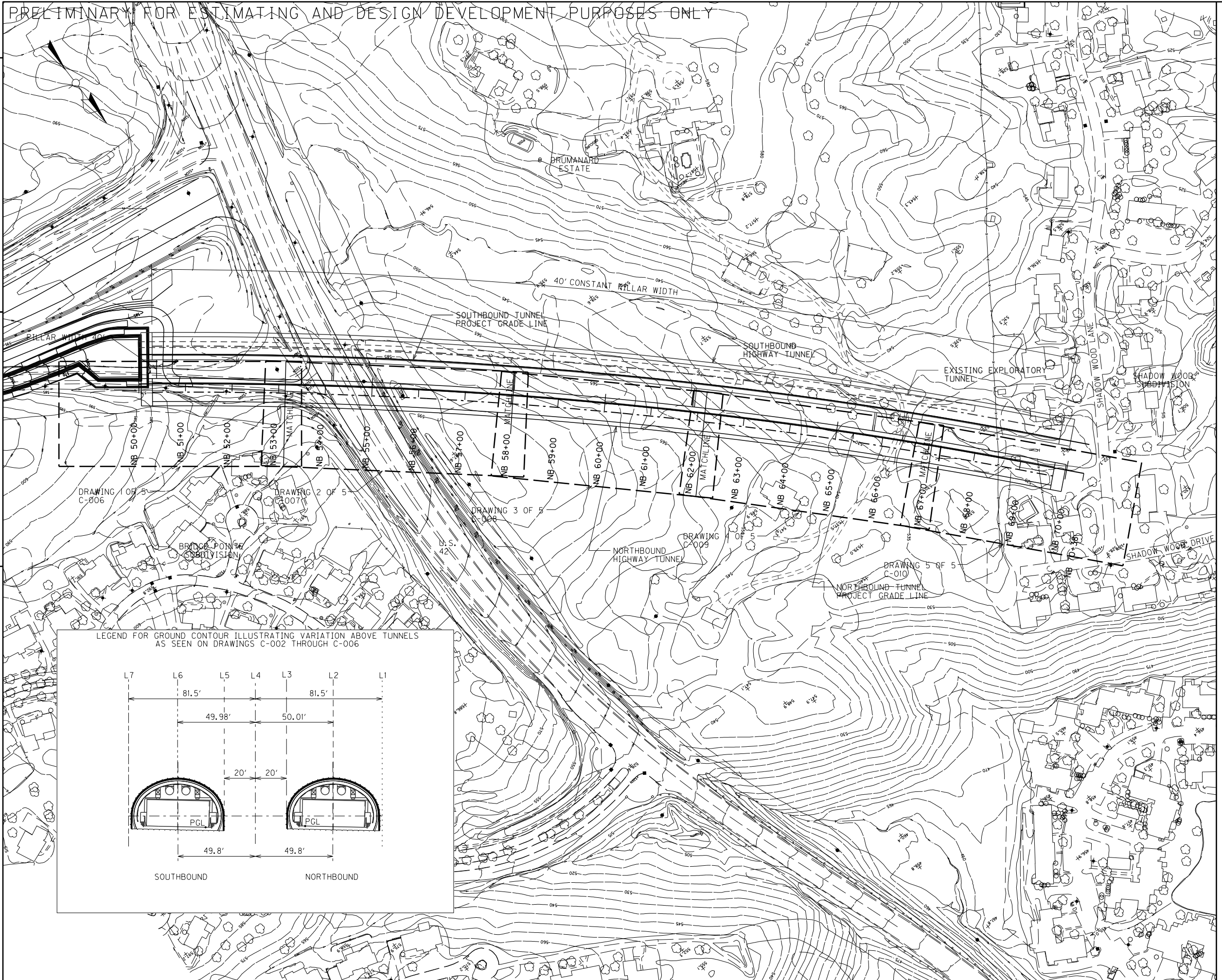
DATE	NO.	REVISION	APPR.
	0	-	
CROSS SECTION AT PORTALS			

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-005	JEFFERSON		

DRAFTED BY D. Jovier DATE 7/19/06
 CHECKED BY D. Watson DATE 7/19/06
 APPROVED BY R. Blanchard DATE 7/19/06

PROJECT NO. 26225 DATE 7/19/06
 DESIGNED BY J. Prodo



PRELIMINARY - NOT FOR CONSTRUCTION
 0 50' 100' 200' 300'
 SCALE: 1"=100'-0"

DATE	NO.	REVISION	APPR.
	0		

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY OF
JEFFERSON

PROJECT _____
 NUMBERS: _____

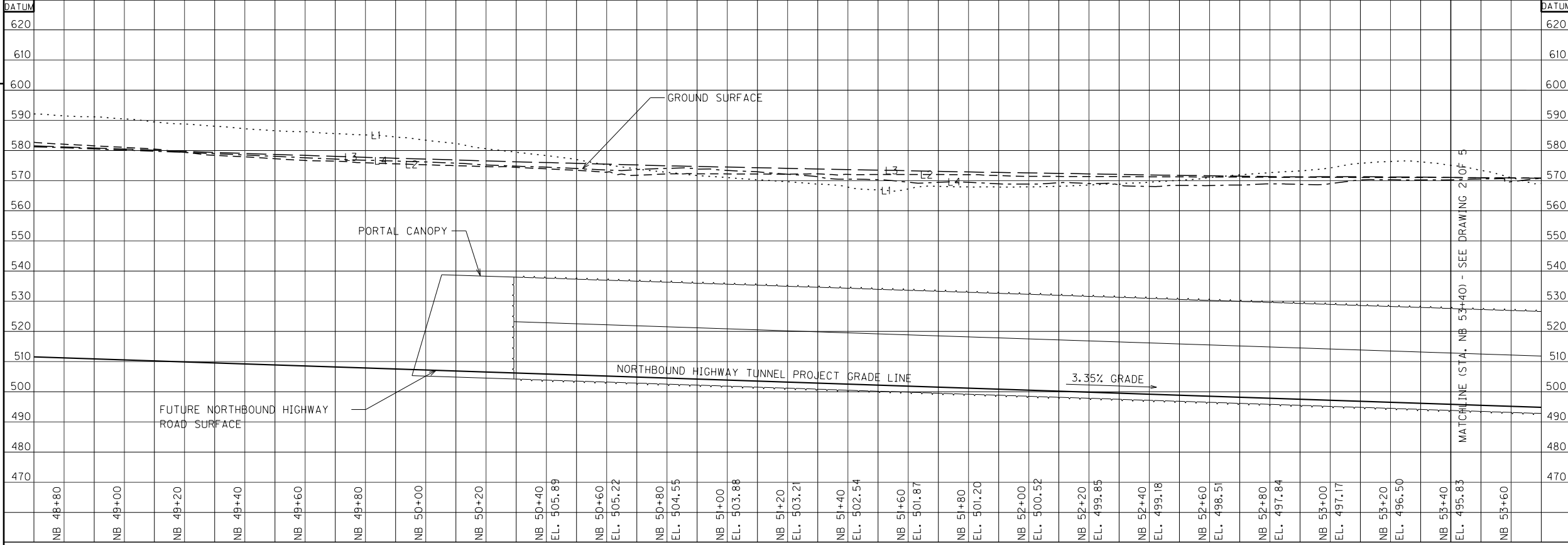
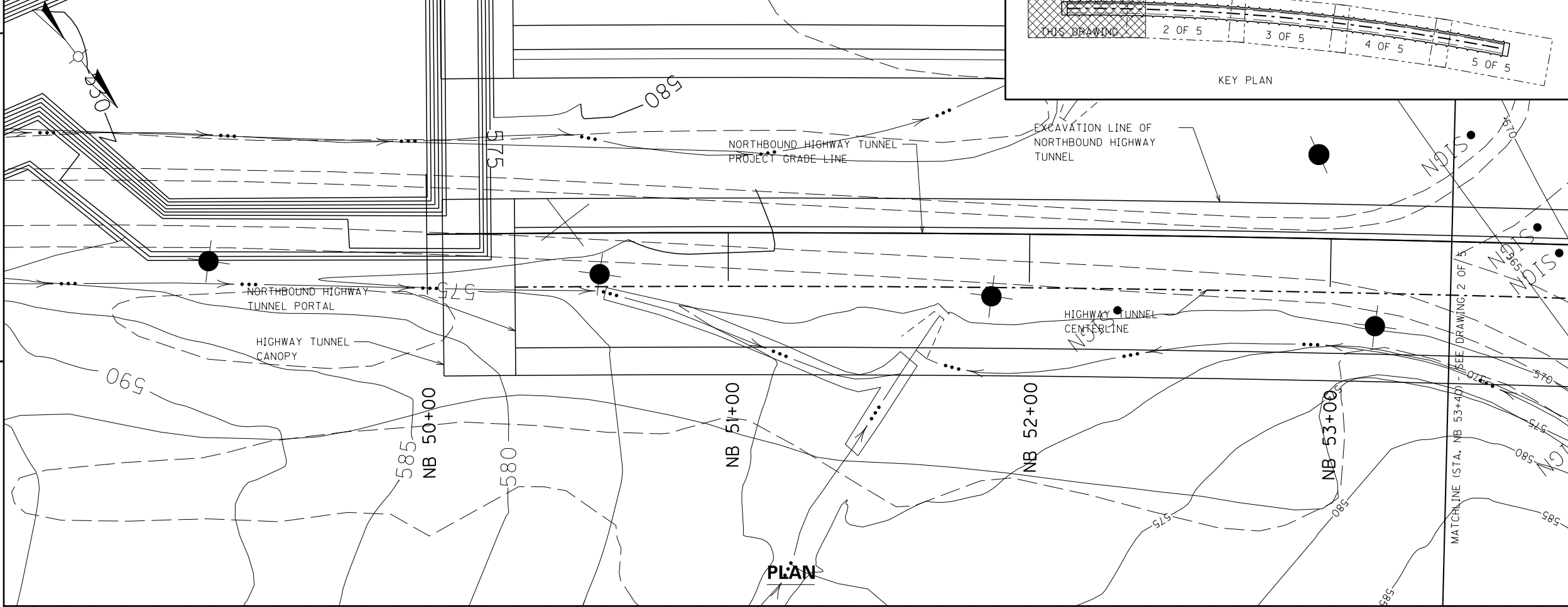
KEY PLAN
 NORTHBOUND HIGHWAY TUNNEL
 PLAN AND PROFILE

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: C005.dgn
 DRAWING NO.: C-005

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-006	JEFFERSON		

PROJECT NO.	26225	DATE	
DESIGNED BY	J. Prada	DATE	
DRAFTED BY	G. McCurley	DATE	
CHECKED BY	D. Watson	DATE	
APPROVED BY	R. Bancharth	DATE	



VERTICAL ALIGNMENT

NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-005.

PRELIMINARY - NOT FOR CONSTRUCTION

HORIZONTAL: 0 10' 20' 40' 60'
 SCALE: 1"=20'-0"

VERTICAL: 0 10' 20' 40' 60'
 SCALE: 1"=20'-0"

DATE	NO.	REVISION	APPR.
	0	-	

NORTHBOUND HIGHWAY TUNNEL
 PLAN AND PROFILE
 1 OF 5

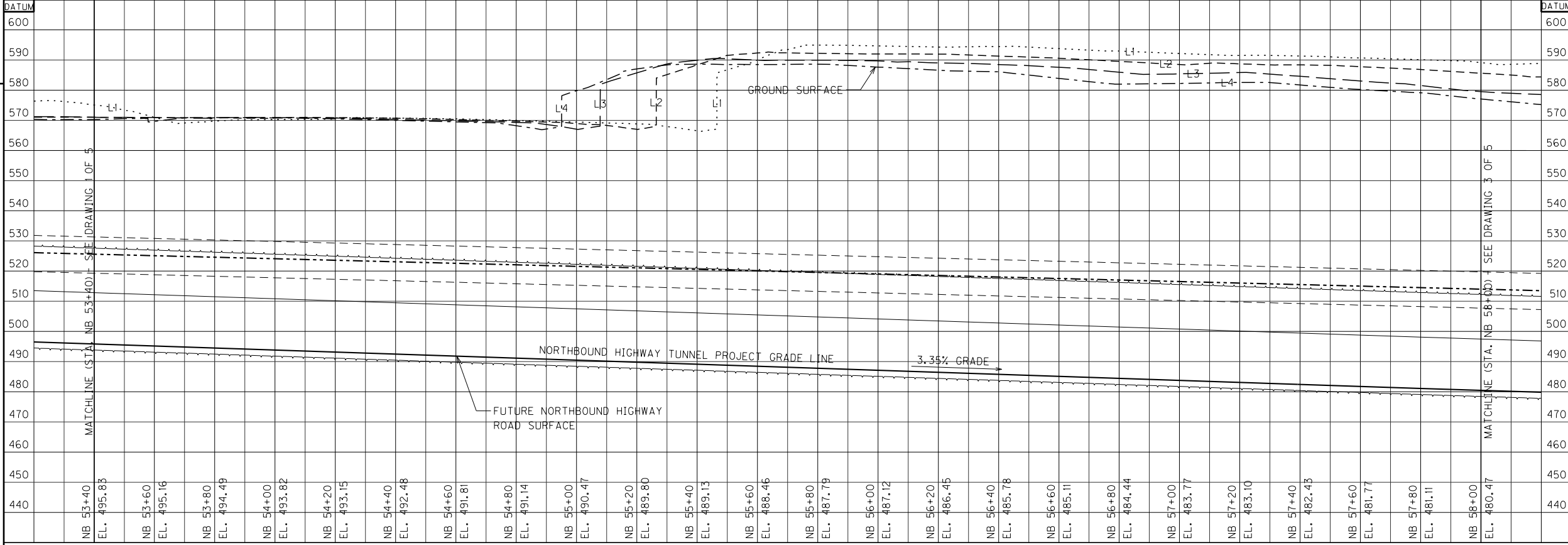
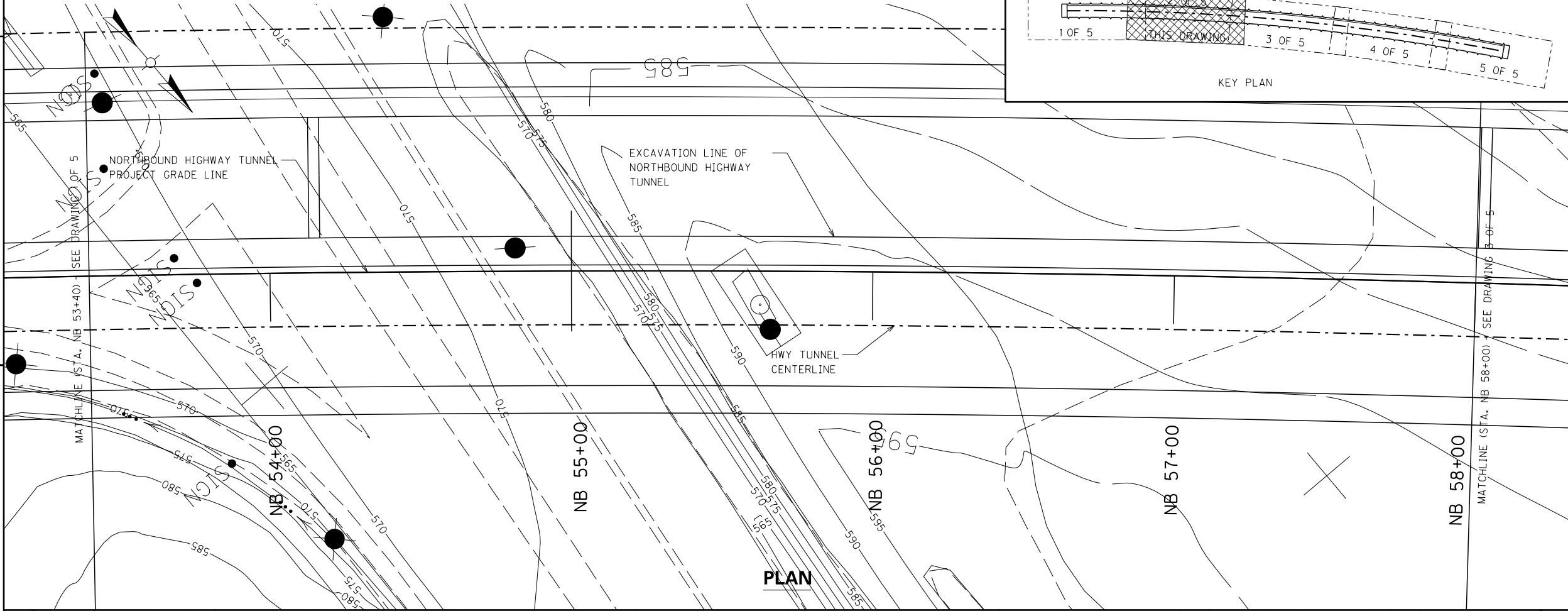
USER: wangjin
 DATE: 12/9/2011
 FILE NAME: C006.dgn
 DRAWING NO.: C-006

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-007	JEFFERSON		

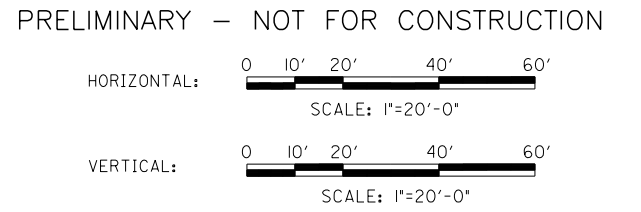
PROJECT NO. 26225
 DESIGNED BY J. Prado
 DRAFTED BY G. McCurley
 CHECKED BY D. Watson
 APPROVED BY R. Bancharth

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: C007.dgn
 DRAWING NO.: C-007



VERTICAL ALIGNMENT

NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-005.

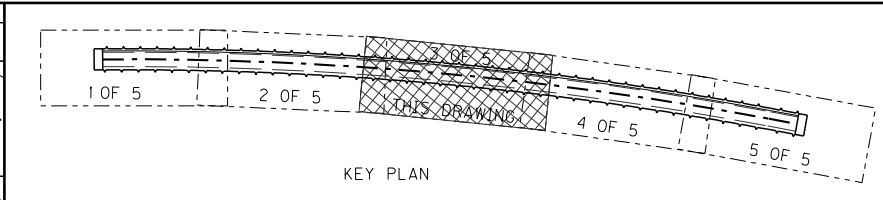


DATE	NO.	REVISION	APPR.
	0	-	

NORTHBOUND HIGHWAY TUNNEL
 PLAN AND PROFILE
 2 OF 5

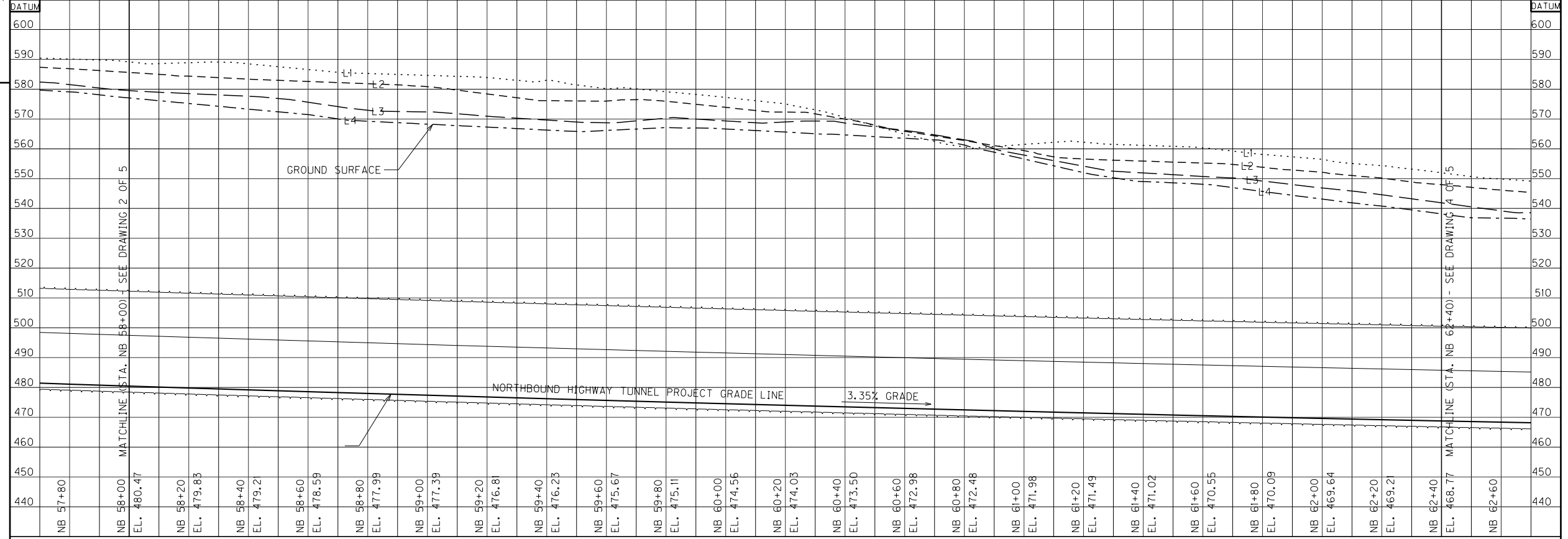
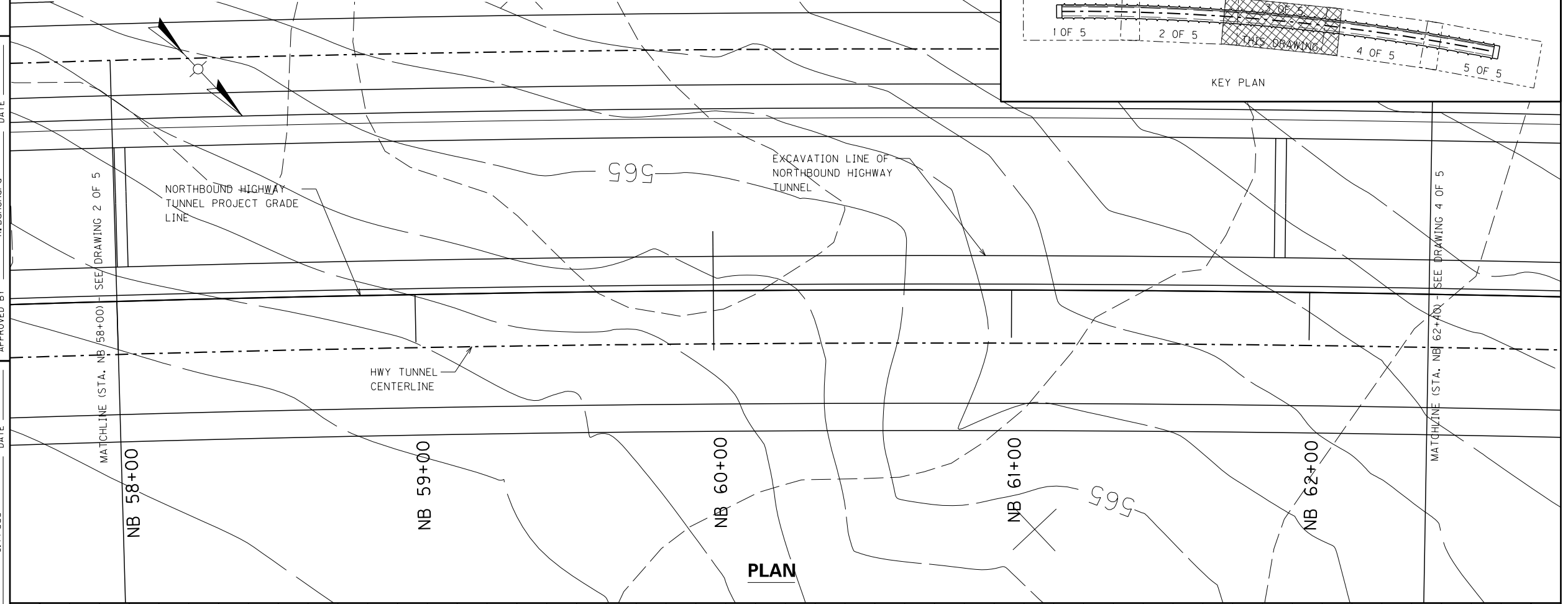
PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-008	JEFFERSON		



DESIGNED BY: wanglin
 PROJECT NO.: 26225
 DRAFTED BY: G. McCurley
 CHECKED BY: D. Watson
 APPROVED BY: R. Banchoard

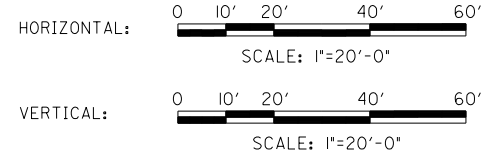
DATE: 12/9/2011
 FILE NAME: C008.dgn
 DRAWING NO.: C-008



VERTICAL ALIGNMENT

NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-005.

PRELIMINARY - NOT FOR CONSTRUCTION



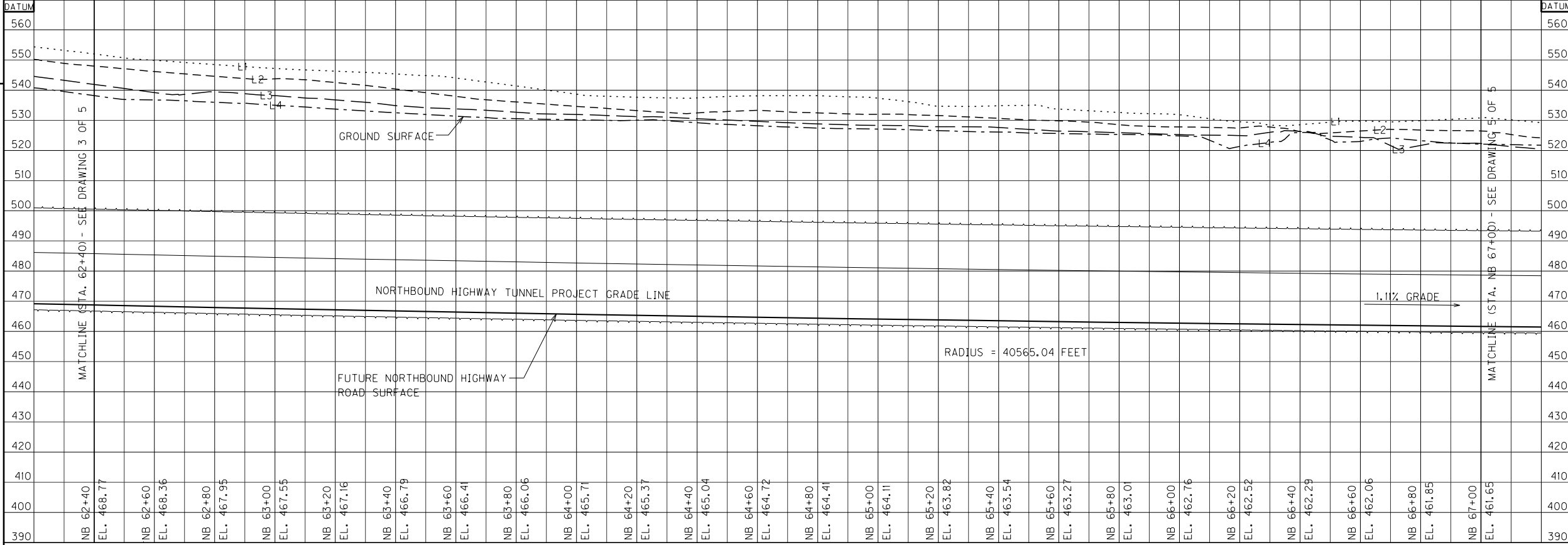
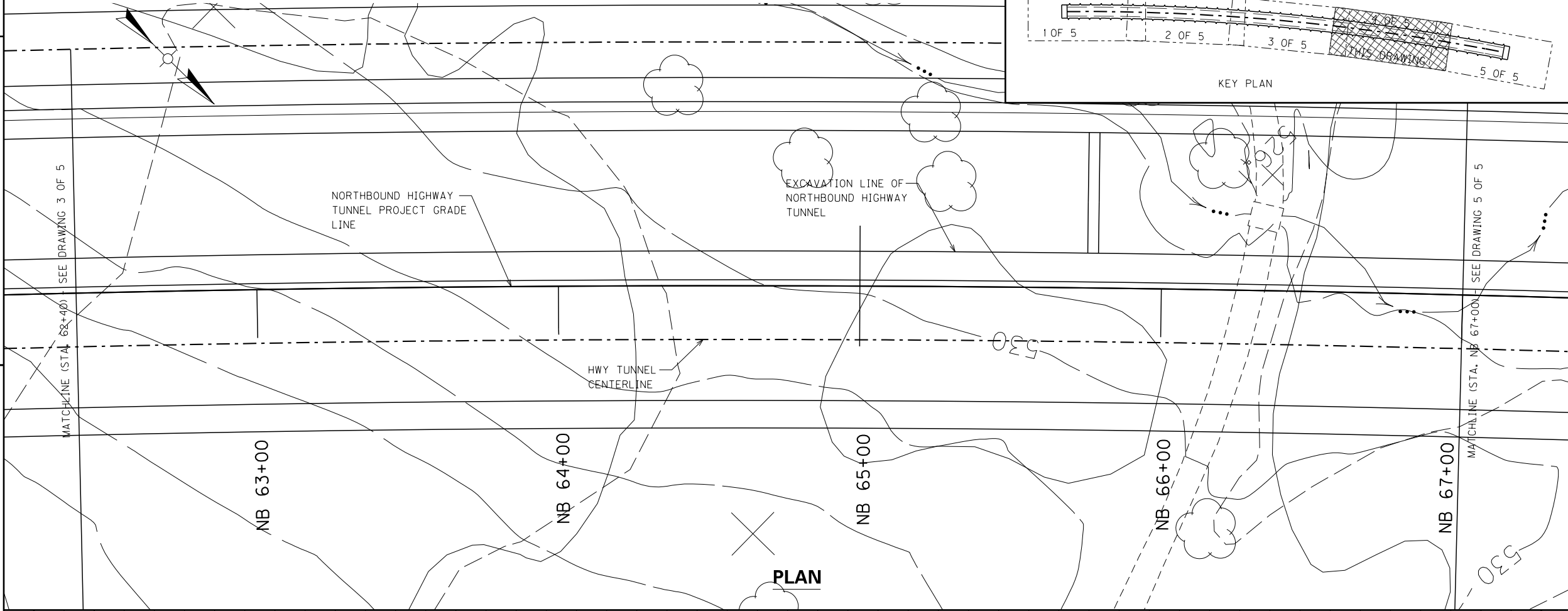
DATE	NO.	REVISION	APPR.
	0	-	

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-009	JEFFERSON		

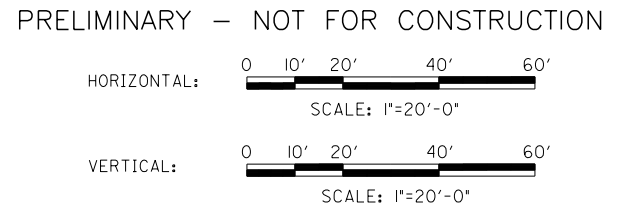
PROJECT NO. 26225
 DESIGNED BY J. Prado
 DRAFTED BY G. McCurley
 CHECKED BY D. Watson
 APPROVED BY R. Banerhard

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: C009.dgn
 DRAWING NO.: C-009



VERTICAL ALIGNMENT

NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-005.

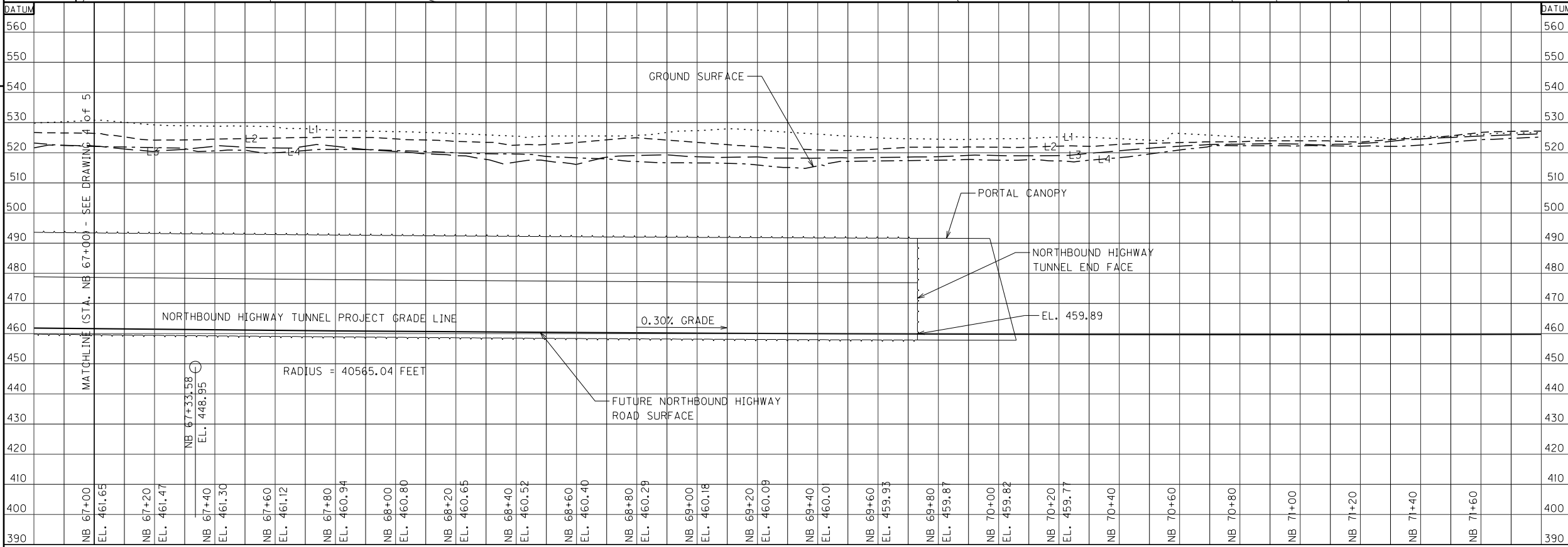
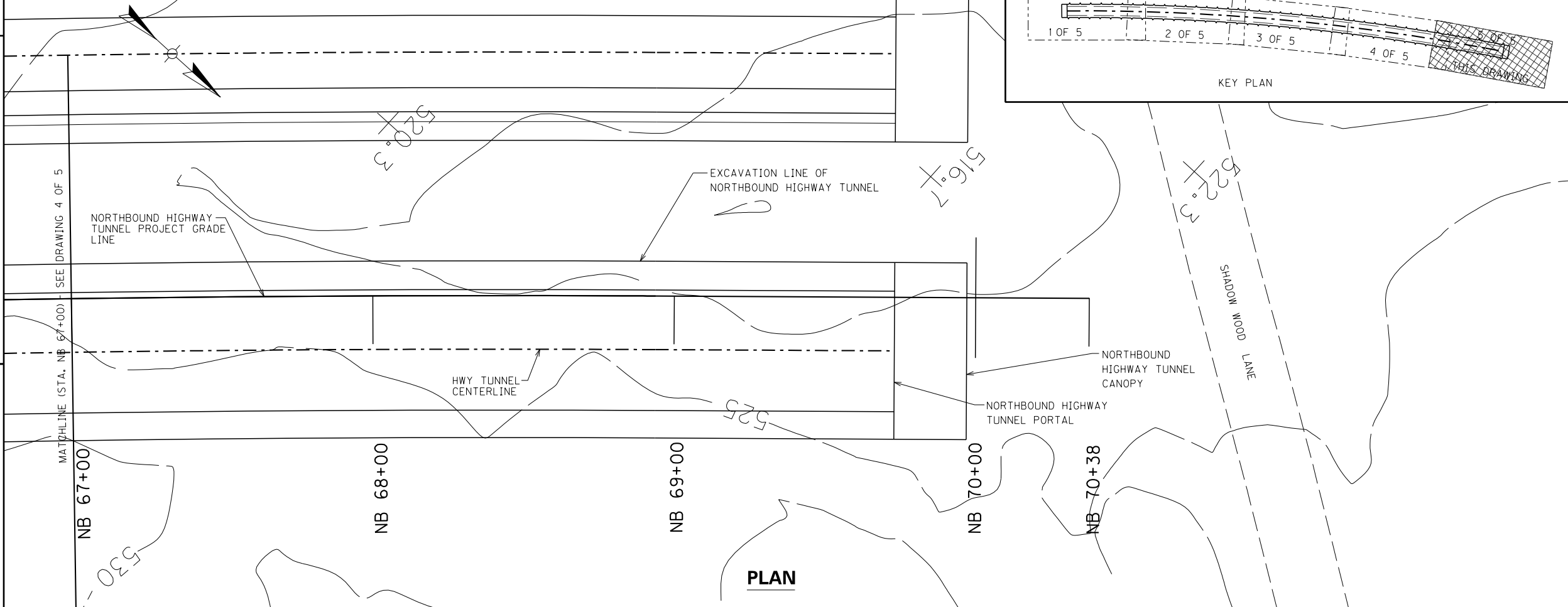


DATE	NO.	REVISION	APPR.
	0	-	

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-010	JEFFERSON		

PROJECT NO. 26225
 DESIGNED BY J. Prada
 DRAFTED BY G. McCurley
 CHECKED BY D. Watson
 APPROVED BY R. Banchard



NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-005.

PRELIMINARY - NOT FOR CONSTRUCTION
 HORIZONTAL: 0 10' 20' 40' 60'
 SCALE: 1"=20'-0"
 VERTICAL: 0 10' 20' 40' 60'
 SCALE: 1"=20'-0"

DATE	NO.	REVISION	APPR.
	0	-	

NORTHBOUND HIGHWAY TUNNEL
 PLAN AND PROFILE
 5 OF 5

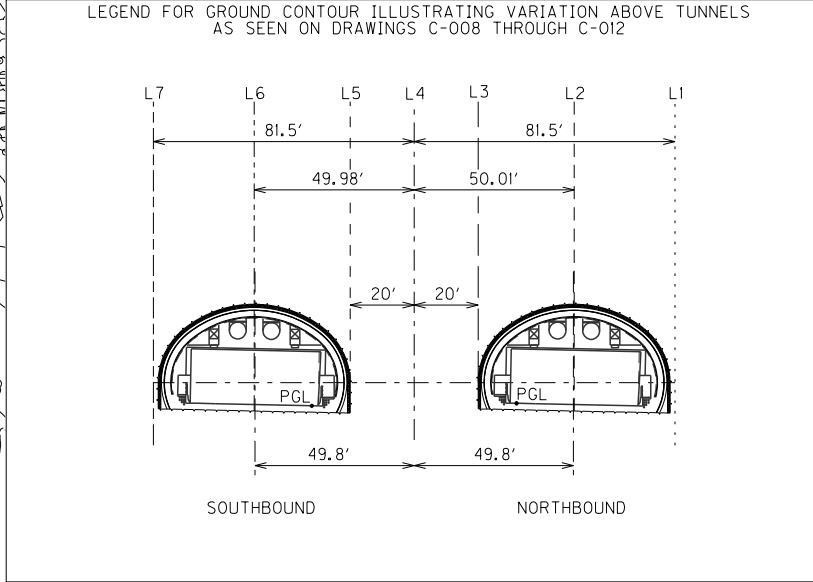
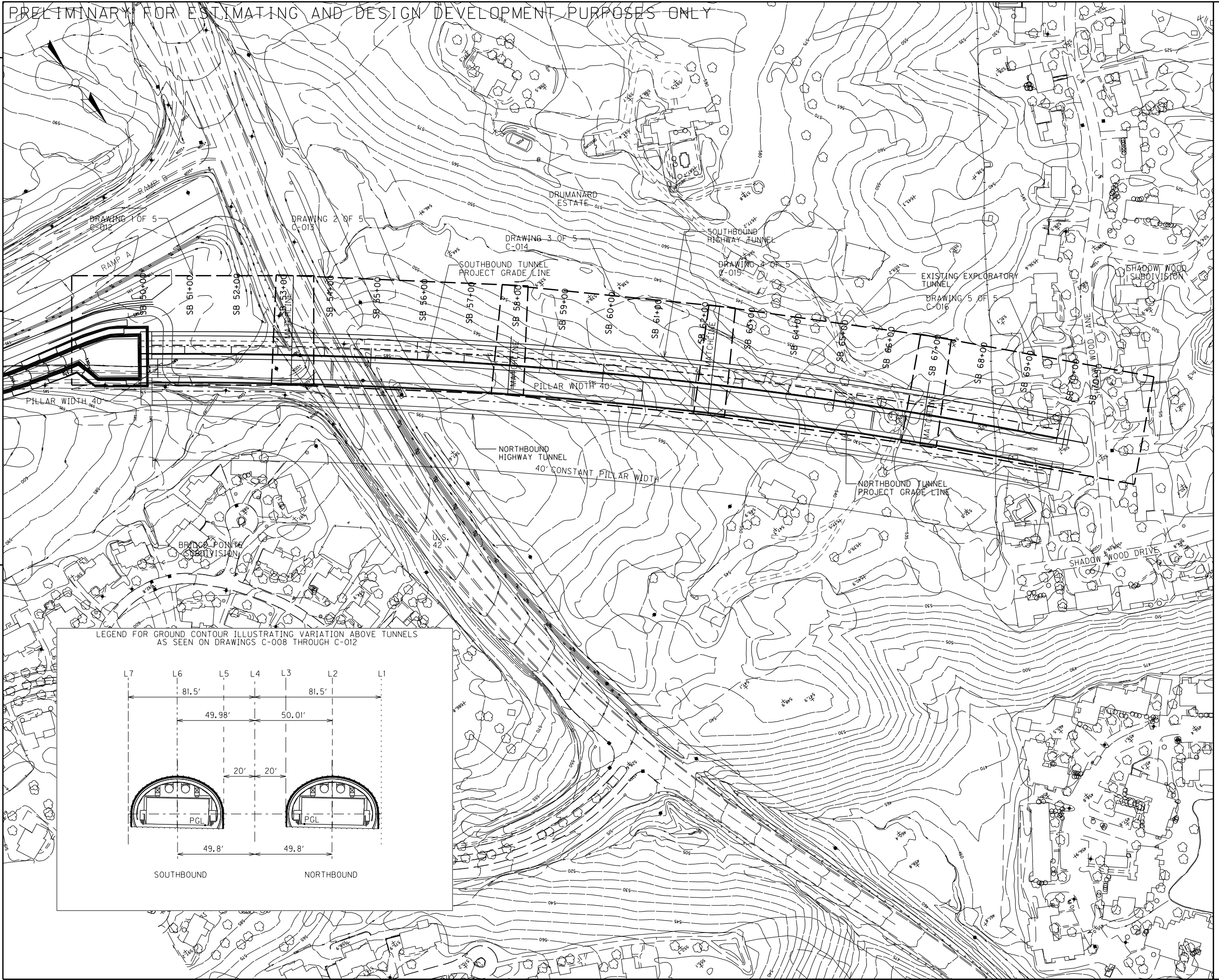
USER: wangjin
 DATE: 12/9/2011
 FILE NAME: C010.dgn
 DRAWING NO.: C-010

VERTICAL ALIGNMENT

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-011	JEFFERSON		

PROJECT NO. 26225
 DESIGNED BY J. Prado
 DRAFTED BY D. Jovier
 CHECKED BY D. Watson
 APPROVED BY R. Blanchard
 DATE 7/19/06
 DATE 7/19/06
 DATE 7/19/06



PRELIMINARY - NOT FOR CONSTRUCTION
 0 50' 100' 200' 300'
 SCALE: 1"=100'-0"

DATE	NO.	REVISION	APPR.
0			

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY OF
JEFFERSON

PROJECT _____
 NUMBERS: _____

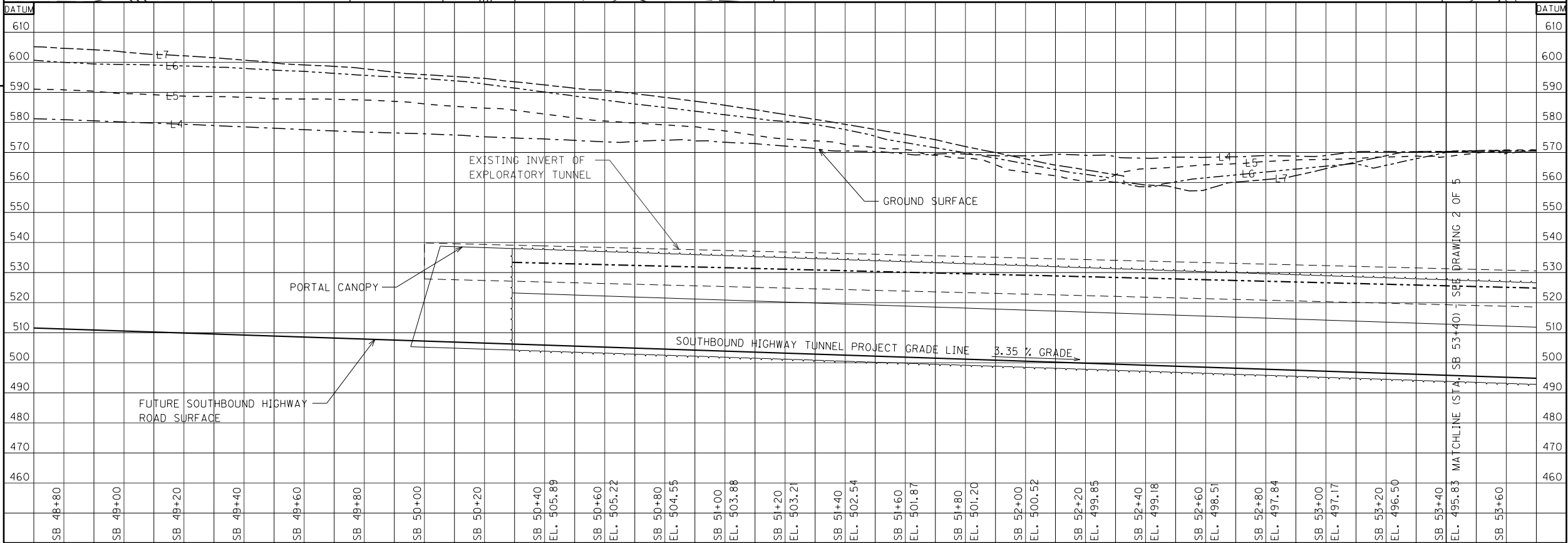
KEY PLAN
 SOUTHBOUND HIGHWAY TUNNEL
 PLAN AND PROFILE

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: C011.dgn
 DRAWING NO.: C-011

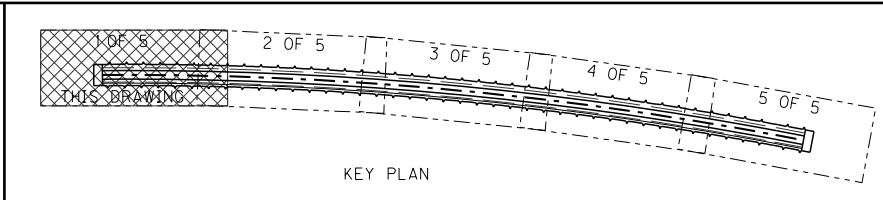
PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-012	JEFFERSON		

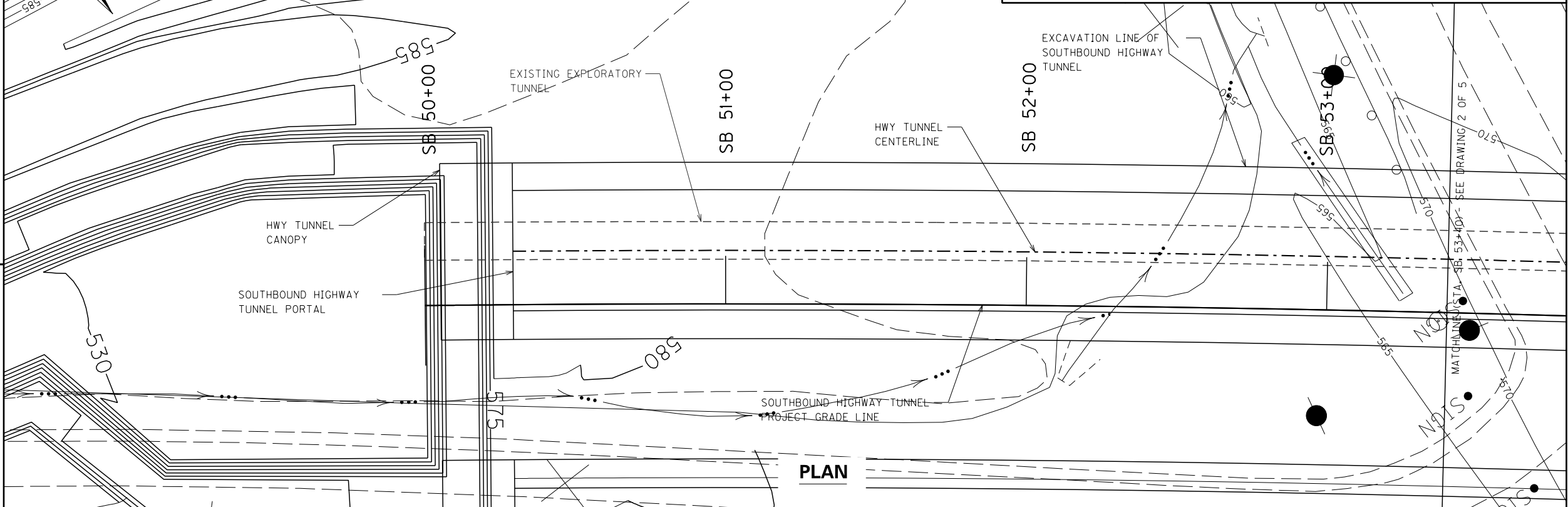
PROJECT NO. 26225
 DESIGNED BY J. Prado
 DRAFTED BY G. McCurley
 CHECKED BY D. Watson
 APPROVED BY R. Bancharth



VERTICAL ALIGNMENT



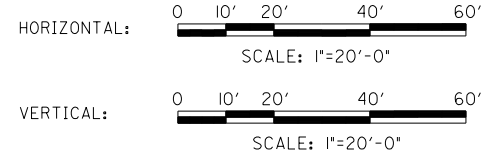
KEY PLAN



PLAN

NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-011.

PRELIMINARY - NOT FOR CONSTRUCTION



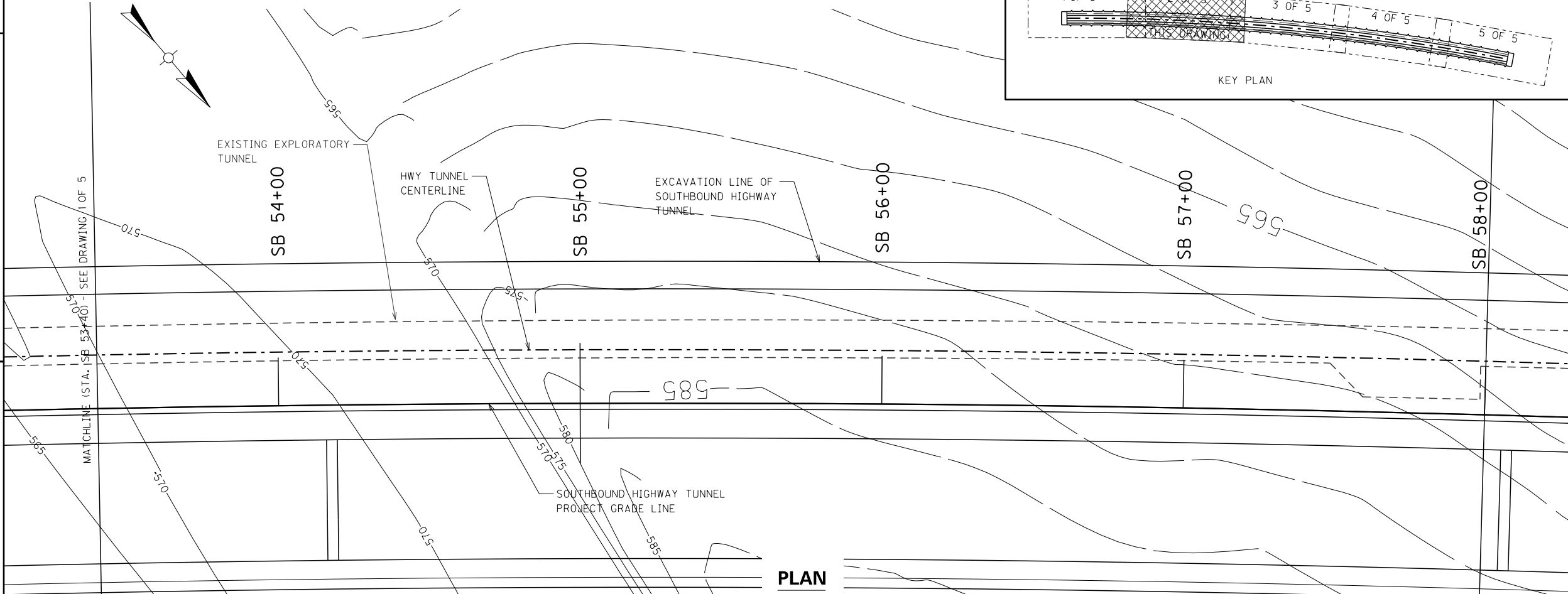
DATE	NO.	REVISION	APPR.
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USER: wanglin
 DATE: 12/9/2011
 FILE NAME: C012.dgn
 DRAWING NO.: C-012

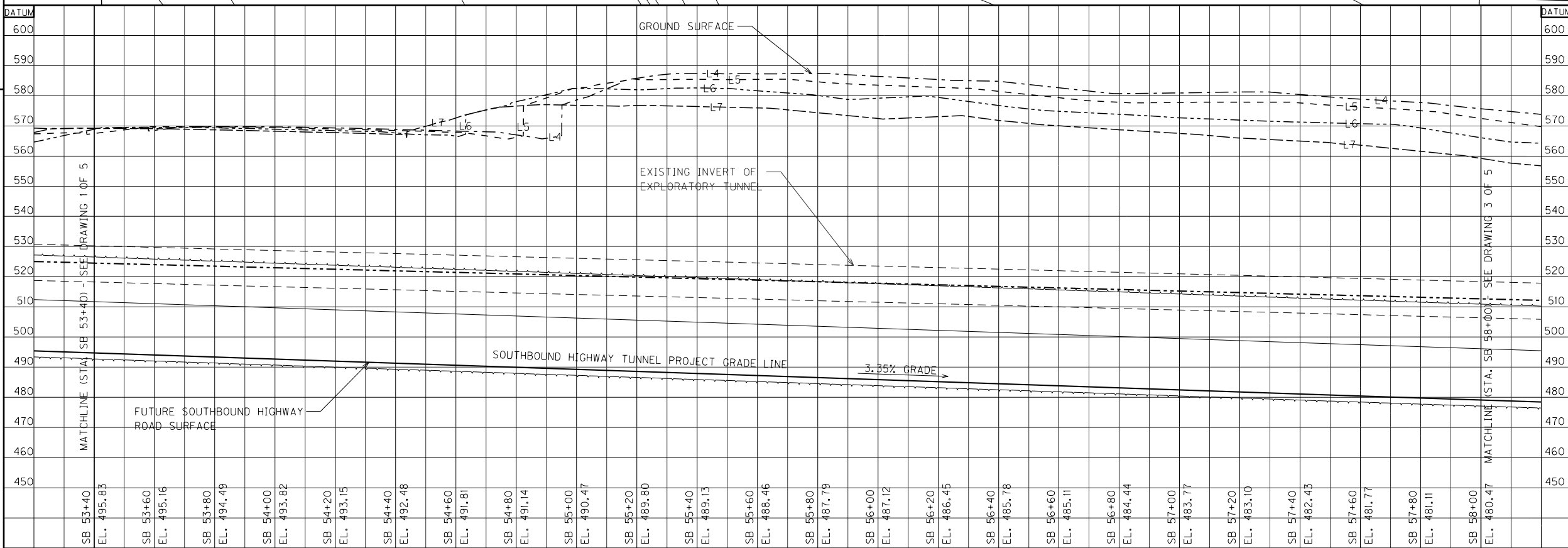
PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-013	JEFFERSON		

PROJECT NO.	26225
DESIGNED BY	J. Prada
DRAFTED BY	G. McCurley
CHECKED BY	D. Watson
APPROVED BY	R. Bancharth
DATE	



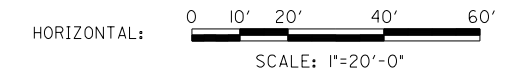
PLAN



VERTICAL ALIGNMENT

- NOTES:
- FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-011.

PRELIMINARY - NOT FOR CONSTRUCTION



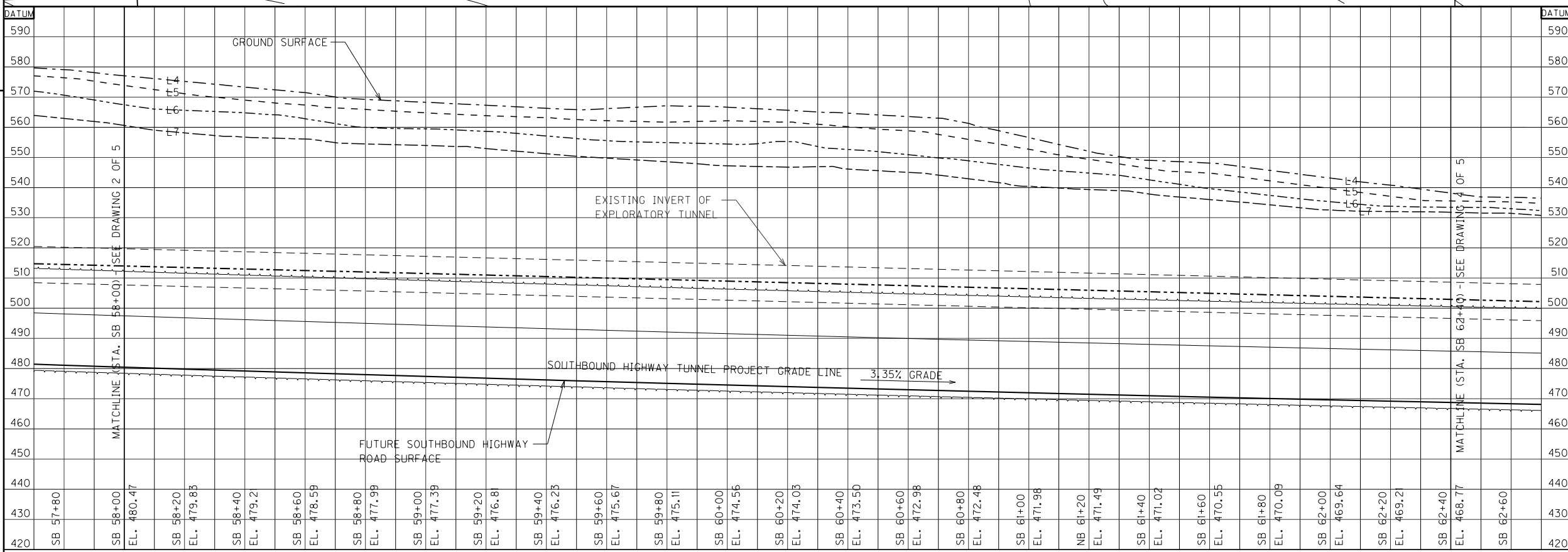
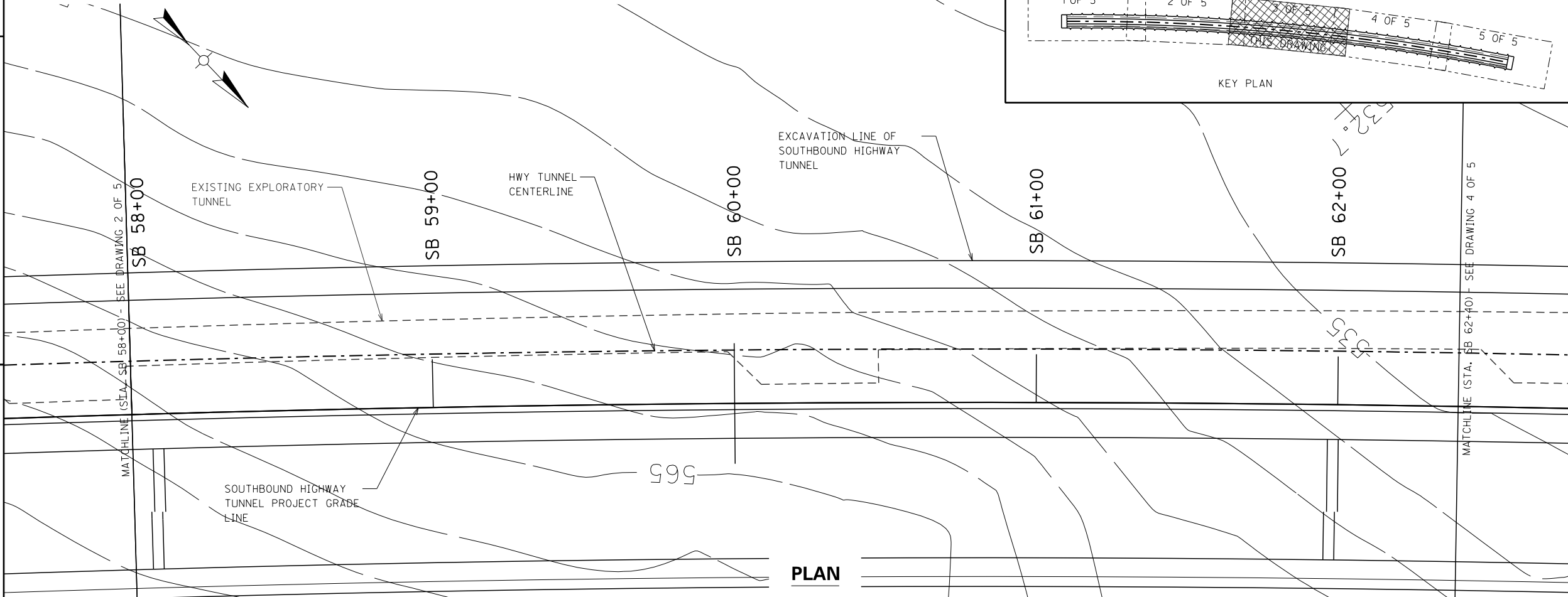
DATE	NO.	REVISION	APPR.
	0	-	

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-014	JEFFERSON		

PROJECT NO. 26225
 DESIGNED BY J. Prada
 DRAFTED BY G. McCurley
 CHECKED BY D. Watson
 APPROVED BY R. Bancharth

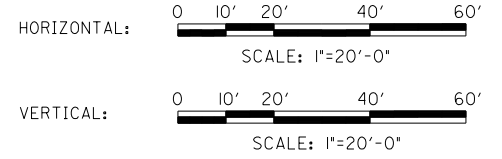
USER: wangjin
 DATE: 12/9/2011
 FILE NAME: C014.dgn
 DRAWING NO.: C-014



VERTICAL ALIGNMENT

NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-011.

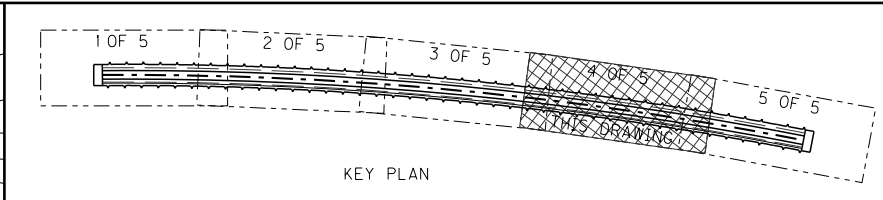
PRELIMINARY - NOT FOR CONSTRUCTION



DATE	NO.	REVISION	APPR.
	0	-	

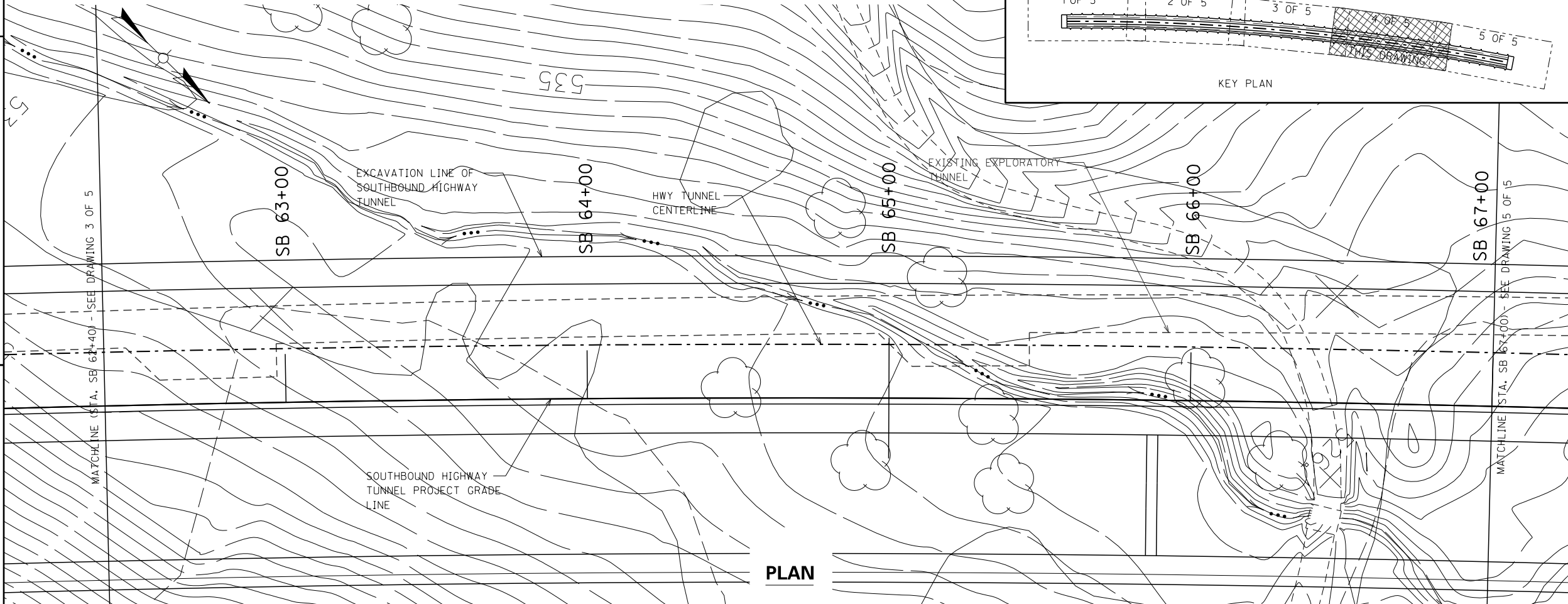
PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-015	JEFFERSON		

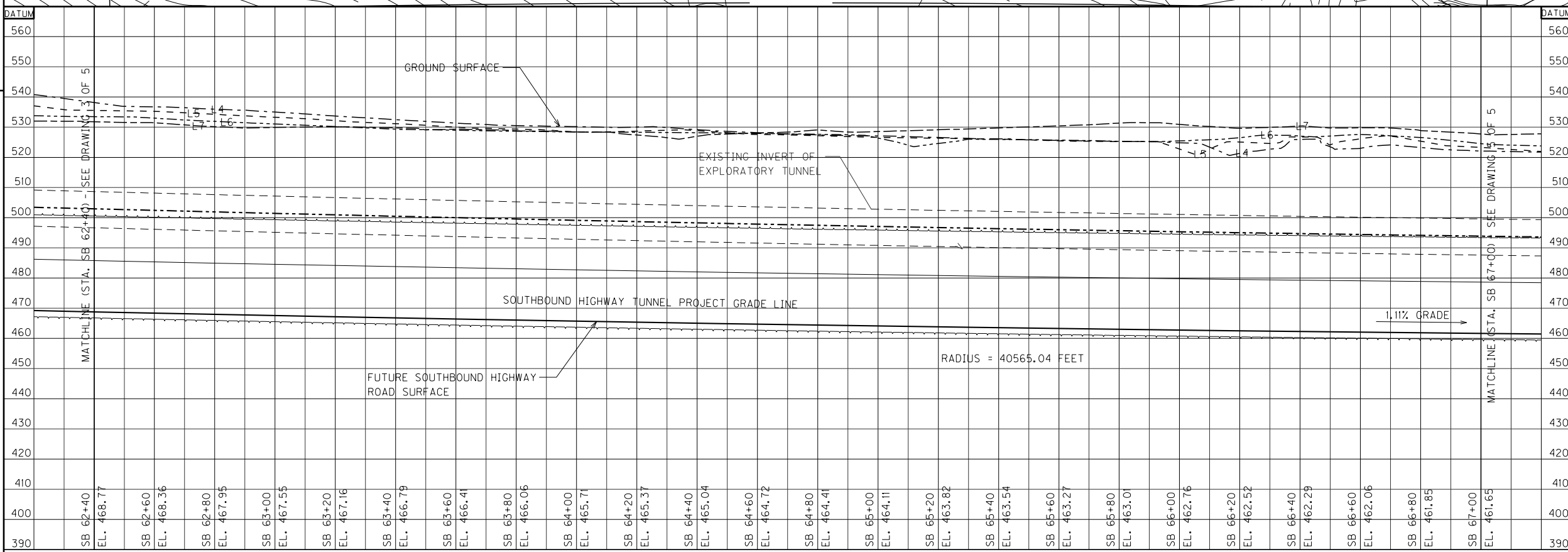


PROJECT NO. 26225
 DESIGNED BY J. Prado
 DRAFTED BY G. McCurley
 CHECKED BY D. Watson
 APPROVED BY R. Bancharth

DATE _____
 DATE _____
 DATE _____



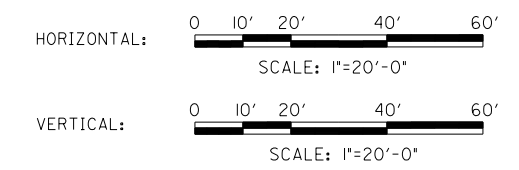
PLAN



VERTICAL ALIGNMENT

NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-011.

PRELIMINARY - NOT FOR CONSTRUCTION

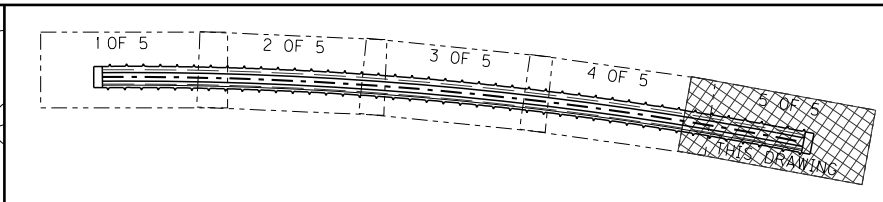
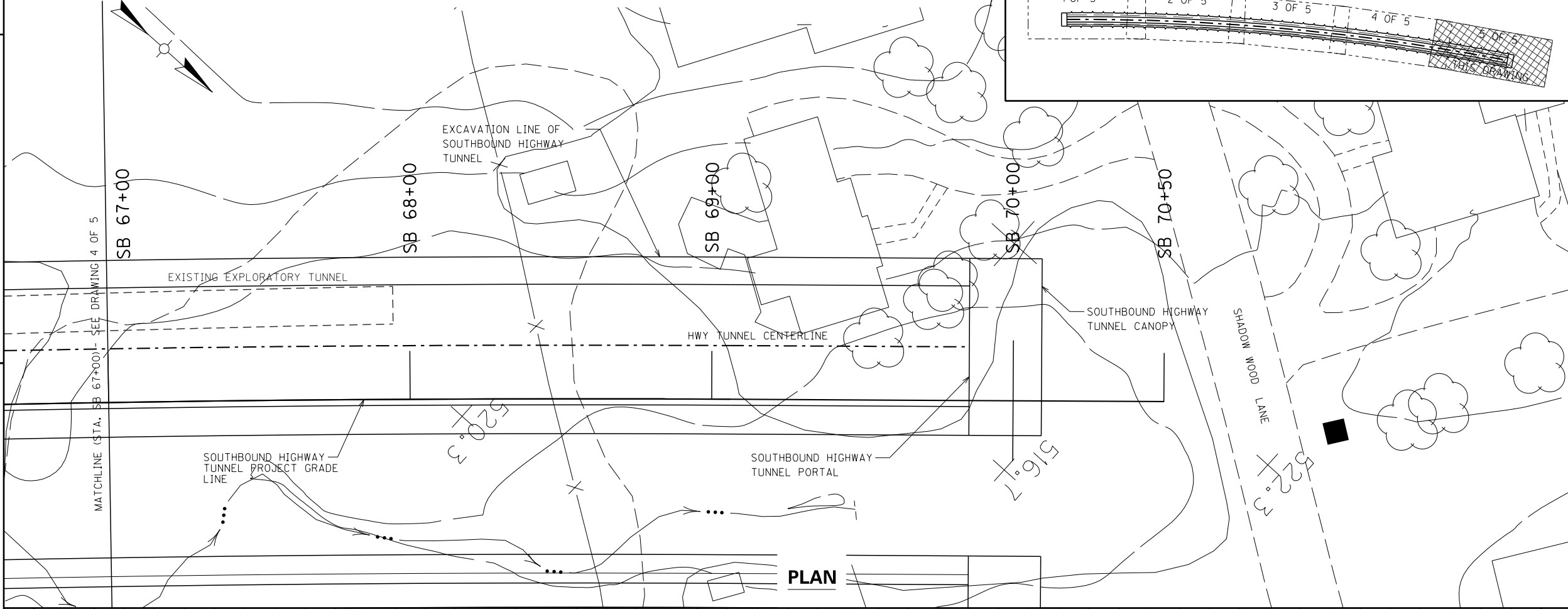


DATE	NO.	REVISION	APPR.
	0	-	

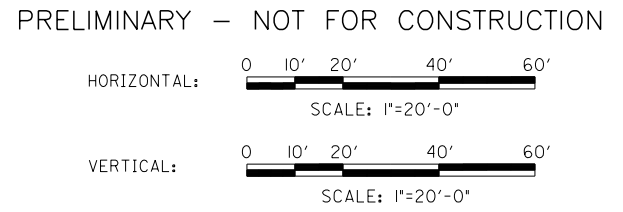
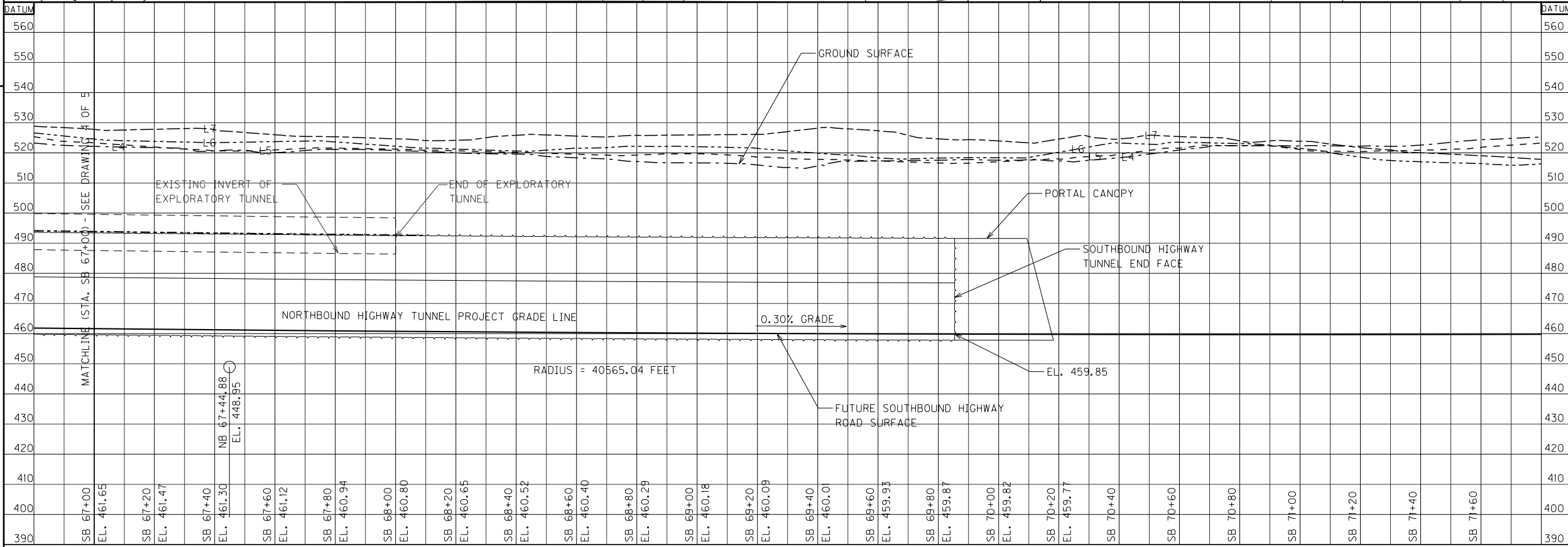
PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
C-016	JEFFERSON		

PROJECT NO.	DATE
26225	
DRAWN BY	DATE
G. McCurley	
CHECKED BY	DATE
D. Watson	
APPROVED BY	DATE
R. Banchard	



NOTES:
 1. FOR LOCATION OF GROUND CONTOUR ABOVE TUNNEL AS SHOWN ON PROFILE, REFER TO DRAWING C-011.



DATE	NO.	REVISION	APPR.
	0	-	

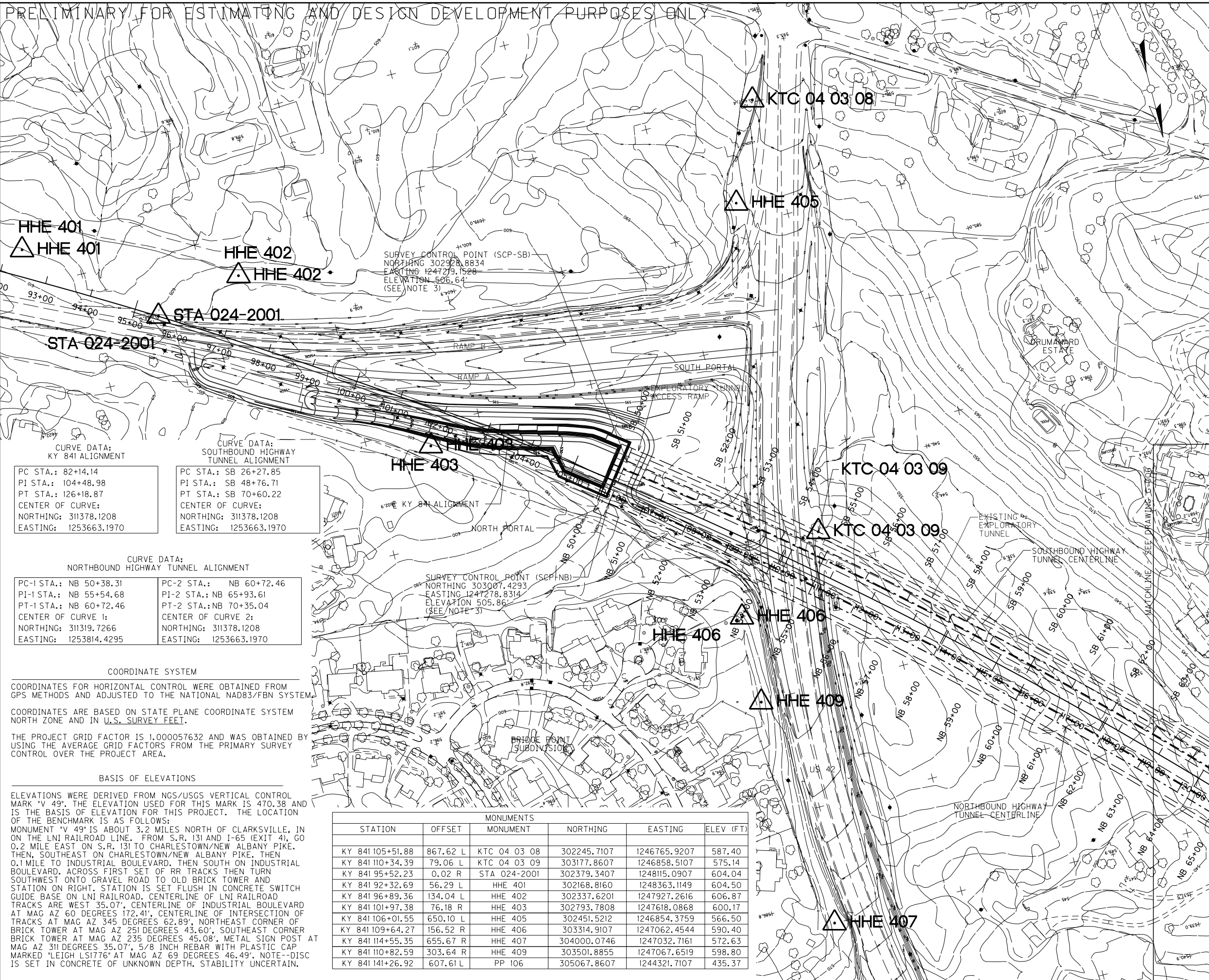
USER: wangjin
 DATE: 12/9/2011
 FILE NAME: C016.dgn
 DRAWING NO.: C-016

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-005	JEFFERSON		

DRAFTED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

PROJECT NO. 216225
 DESIGNED BY _____ DATE _____



CURVE DATA:
 KY 841 ALIGNMENT
 PC STA.: 82+14.14
 PI STA.: 104+48.98
 PT STA.: 126+18.87
 CENTER OF CURVE:
 NORTHING: 311378.1208
 EASTING: 1253663.1970

CURVE DATA:
 SOUTHBOUND HIGHWAY
 TUNNEL ALIGNMENT
 PC STA.: SB 26+27.85
 PI STA.: SB 48+76.71
 PT STA.: SB 70+60.22
 CENTER OF CURVE:
 NORTHING: 311378.1208
 EASTING: 1253663.1970

CURVE DATA:
 NORTHBOUND HIGHWAY
 TUNNEL ALIGNMENT
 PC-1 STA.: NB 50+38.31
 PI-1 STA.: NB 55+54.68
 PT-1 STA.: NB 60+72.46
 CENTER OF CURVE 1:
 NORTHING: 311319.7266
 EASTING: 1253814.4295

CURVE DATA:
 NORTHBOUND HIGHWAY
 TUNNEL ALIGNMENT
 PC-2 STA.: NB 60+72.46
 PI-2 STA.: NB 65+93.61
 PT-2 STA.: NB 70+35.04
 CENTER OF CURVE 2:
 NORTHING: 311378.1208
 EASTING: 1253663.1970

COORDINATE SYSTEM
 COORDINATES FOR HORIZONTAL CONTROL WERE OBTAINED FROM GPS METHODS AND ADJUSTED TO THE NATIONAL NAD83/FBN SYSTEM.
 COORDINATES ARE BASED ON STATE PLANE COORDINATE SYSTEM NORTH ZONE AND IN U.S. SURVEY FEET.
 THE PROJECT GRID FACTOR IS 1.000057632 AND WAS OBTAINED BY USING THE AVERAGE GRID FACTORS FROM THE PRIMARY SURVEY CONTROL OVER THE PROJECT AREA.

BASIS OF ELEVATIONS
 ELEVATIONS WERE DERIVED FROM NGS/USGS VERTICAL CONTROL MARK "V 49". THE ELEVATION USED FOR THIS MARK IS 470.38 AND IS THE BASIS OF ELEVATION FOR THIS PROJECT. THE LOCATION OF THE BENCHMARK IS AS FOLLOWS:
 MONUMENT "V 49" IS ABOUT 3.2 MILES NORTH OF CLARKSVILLE, IN ON THE LNI RAILROAD LINE. FROM S.R. 131 AND I-65 (EXIT 4), GO 0.2 MILE EAST ON S.R. 131 TO CHARLESTOWN/NEW ALBANY PIKE, THEN, SOUTHEAST ON CHARLESTOWN/NEW ALBANY PIKE, THEN 0.1 MILE TO INDUSTRIAL BOULEVARD, THEN SOUTH ON INDUSTRIAL BOULEVARD. ACROSS FIRST SET OF RR TRACKS THEN TURN SOUTHWEST ONTO GRAVEL ROAD TO OLD BRICK TOWER AND STATION ON RIGHT. STATION IS SET FLUSH IN CONCRETE SWITCH GUIDE BASE ON LNI RAILROAD, CENTERLINE OF LNI RAILROAD TRACKS ARE WEST 35.07', CENTERLINE OF INDUSTRIAL BOULEVARD AT MAG AZ 60 DEGREES 172.41', CENTERLINE OF INTERSECTION OF TRACKS AT MAG AZ 345 DEGREES 62.89', NORTHEAST CORNER OF BRICK TOWER AT MAG AZ 251 DEGREES 45.60', SOUTHEAST CORNER BRICK TOWER AT MAG AZ 235 DEGREES 45.08', METAL SIGN POST AT MAG AZ 311 DEGREES 35.07', 5/8 INCH REBAR WITH PLASTIC CAP MARKED "LEIGH LS1776" AT MAG AZ 69 DEGREES 46.49'. NOTE -DJSC IS SET IN CONCRETE OF UNKNOWN DEPTH, STABILITY UNCERTAIN.

MONUMENTS					
STATION	OFFSET	MONUMENT	NORTHING	EASTING	ELEV (FT)
KY 841 105+51.88	867.62 L	KTC 04 03 08	302245.7107	1246765.9207	587.40
KY 841 110+34.39	79.06 L	KTC 04 03 09	303177.8607	1246858.5107	575.14
KY 841 95+52.23	0.02 R	STA 024-2001	302379.3407	1248115.0907	604.04
KY 841 92+32.69	56.29 L	HHE 401	302168.8160	1248363.1149	604.50
KY 841 96+89.36	134.04 L	HHE 402	302337.6201	1247927.2616	606.87
KY 841 101+97.38	76.18 R	HHE 403	302793.7808	1247618.0868	600.17
KY 841 106+01.55	650.10 L	HHE 405	302451.5212	1246854.3759	566.50
KY 841 109+64.27	156.52 R	HHE 406	303314.9107	1247062.4544	590.40
KY 841 114+55.35	655.67 R	HHE 407	304000.0746	1247032.7161	572.63
KY 841 110+82.59	303.64 R	HHE 409	303501.8855	1247067.6519	598.80
KY 841 141+26.92	607.61 L	PP 106	305067.8607	1244321.7107	435.37

- NOTES:
- MONUMENTS SHOWN IN THE VICINITY OF THE HIGHWAY TUNNELS ARE BASED ON THE PHOTOGRAMMETRIC GROUND CONTROL SURVEY REPORT PROVIDED BY H.W. LOCHNER.
 - ADDITIONAL MONUMENTS MAY NEED TO BE INSTALLED IF THE CURRENT MONUMENT LOCATION ARE IMPACTED BY THE PROJECT CONSTRUCTION INCLUDING BUT NOT LIMITED TO THE RELOCATION OF THE US 42 RAMPS AND THE CONSTRUCTION OF THE EXPLORATORY TUNNEL.
 - SOUTH PORTAL LOCATIONS AND ELEVATIONS TO BE DETERMINED DURING FINAL DESIGN.

LEGEND:
 SURVEY MONUMENT

PRELIMINARY - NOT FOR CONSTRUCTION

 SCALE: 1"=100'-0"

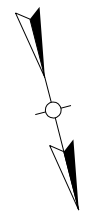
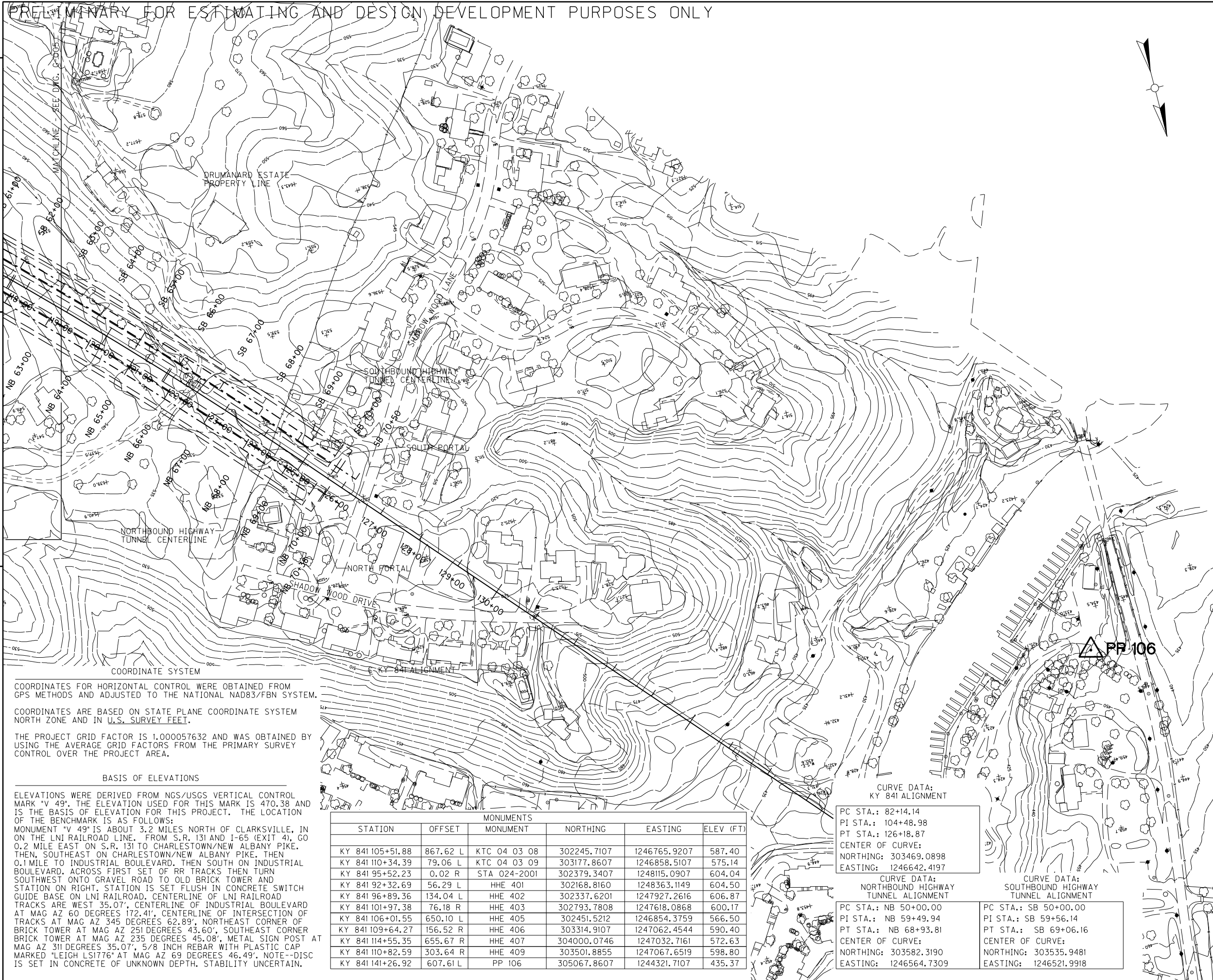
DATE	NO.	REVISION	APPR.
	0		
INDEX SITE MAP, CONTROL POINTS AND SURVEY TIES			
1 OF 2			

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: G005.dgn
 DRAWING NO.: G-005

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-006	JEFFERSON		

PROJECT NO. 216225
 DESIGNED BY _____ DATE _____
 DRAFTED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____



- NOTES:
- MONUMENTS SHOWN IN THE VICINITY OF THE HIGHWAY TUNNELS ARE BASED ON THE PHOTOGRAMMETRIC GROUND CONTROL SURVEY REPORT PROVIDED BY H.W. LOCHNER.
 - ADDITIONAL MONUMENTS MAY NEED TO BE INSTALLED IF THE CURRENT MONUMENT LOCATION ARE IMPACTED BY THE PROJECT CONSTRUCTION INCLUDING BUT NOT LIMITED TO THE RELOCATION OF THE US 42 RAMPS AND THE CONSTRUCTION OF THE EXPLORATORY TUNNEL.
 - NORTH PORTAL LOCATIONS AND ELEVATIONS TO BE DETERMINED DURING FINAL DESIGN

LEGEND:
 SURVEY MONUMENT

COORDINATES FOR HORIZONTAL CONTROL WERE OBTAINED FROM GPS METHODS AND ADJUSTED TO THE NATIONAL NAD83/FBN SYSTEM. COORDINATES ARE BASED ON STATE PLANE COORDINATE SYSTEM NORTH ZONE AND IN U.S. SURVEY FEET. THE PROJECT GRID FACTOR IS 1.000057632 AND WAS OBTAINED BY USING THE AVERAGE GRID FACTORS FROM THE PRIMARY SURVEY CONTROL OVER THE PROJECT AREA.

BASIS OF ELEVATIONS
 ELEVATIONS WERE DERIVED FROM NGS/USGS VERTICAL CONTROL MARK 'V 49'. THE ELEVATION USED FOR THIS MARK IS 470.38 AND IS THE BASIS OF ELEVATION FOR THIS PROJECT. THE LOCATION OF THE BENCHMARK IS AS FOLLOWS: MONUMENT 'V 49' IS ABOUT 3.2 MILES NORTH OF CLARKSVILLE, IN ON THE LNI RAILROAD LINE. FROM S.R. 131 AND I-65 (EXIT 4), GO 0.2 MILE EAST ON S.R. 131 TO CHARLESTOWN/NEW ALBANY PIKE, THEN, SOUTHEAST ON CHARLESTOWN/NEW ALBANY PIKE, THEN 0.1 MILE TO INDUSTRIAL BOULEVARD, THEN SOUTH ON INDUSTRIAL BOULEVARD. ACROSS FIRST SET OF RR TRACKS THEN TURN SOUTHWEST ONTO GRAVEL ROAD TO OLD BRICK TOWER AND STATION ON RIGHT. STATION IS SET FLUSH IN CONCRETE SWITCH GUIDE BASE ON LNI RAILROAD, CENTERLINE OF LNI RAILROAD TRACKS ARE WEST 35.07', CENTERLINE OF INDUSTRIAL BOULEVARD AT MAG AZ 60 DEGREES 172.41', CENTERLINE OF INTERSECTION OF TRACKS AT MAG AZ 345 DEGREES 62.89', NORTHEAST CORNER OF BRICK TOWER AT MAG AZ 251 DEGREES 45.60', SOUTHEAST CORNER BRICK TOWER AT MAG AZ 235 DEGREES 45.08', METAL SIGN POST AT MAG AZ 311 DEGREES 35.07', 5/8 INCH REBAR WITH PLASTIC CAP MARKED 'LEIGH LS1776' AT MAG AZ 69 DEGREES 46.49'. NOTE--DJSC IS SET IN CONCRETE OF UNKNOWN DEPTH, STABILITY UNCERTAIN.

MONUMENTS						
STATION	OFFSET	MONUMENT	NORTHING	EASTING	ELEV (FT)	
KY 841 105+51.88	867.62 L	KTC 04 03 08	302245.7107	1246765.9207	587.40	
KY 841 110+34.39	79.06 L	KTC 04 03 09	303177.8607	1246858.5107	575.14	
KY 841 95+52.23	0.02 R	STA 024-2001	302379.3407	1248115.0907	604.04	
KY 841 92+32.69	56.29 L	HHE 401	302168.8160	1248363.1149	604.50	
KY 841 96+89.36	134.04 L	HHE 402	302337.6201	1247927.2616	606.87	
KY 841 101+97.38	76.18 R	HHE 403	302793.7808	1247618.0868	600.17	
KY 841 106+01.55	650.10 L	HHE 405	302451.5212	1246854.3759	566.50	
KY 841 109+64.27	156.52 R	HHE 406	303314.9107	1247062.4544	590.40	
KY 841 114+55.35	655.67 R	HHE 407	304000.0746	1247032.7161	572.63	
KY 841 110+82.59	303.64 R	HHE 409	303501.8855	1247067.6519	598.80	
KY 841 141+26.92	607.61 L	PP 106	305067.8607	1244321.7107	435.37	

CURVE DATA:
 KY 841 ALIGNMENT
 PC STA.: 82+14.14
 PI STA.: 104+48.98
 PT STA.: 126+18.87
 CENTER OF CURVE:
 NORTHING: 303469.0898
 EASTING: 1246642.4197

CURVE DATA:
 NORTHBOUND HIGHWAY
 TUNNEL ALIGNMENT
 PC STA.: NB 50+00.00
 PI STA.: NB 59+49.94
 PT STA.: NB 68+93.81
 CENTER OF CURVE:
 NORTHING: 303582.3190
 EASTING: 1246564.7309

CURVE DATA:
 SOUTHBOUND HIGHWAY
 TUNNEL ALIGNMENT
 PC STA.: SB 50+00.00
 PI STA.: SB 59+56.14
 PT STA.: SB 69+06.16
 CENTER OF CURVE:
 NORTHING: 303535.9481
 EASTING: 1246521.9918

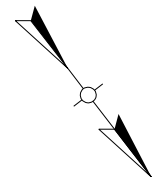
PRELIMINARY - NOT FOR CONSTRUCTION

 SCALE: 1"=100'-0"

DATE	NO.	REVISION	APPR.
	0		
INDEX SITE MAP, CONTROL POINTS AND SURVEY TIES			
2 OF 2			

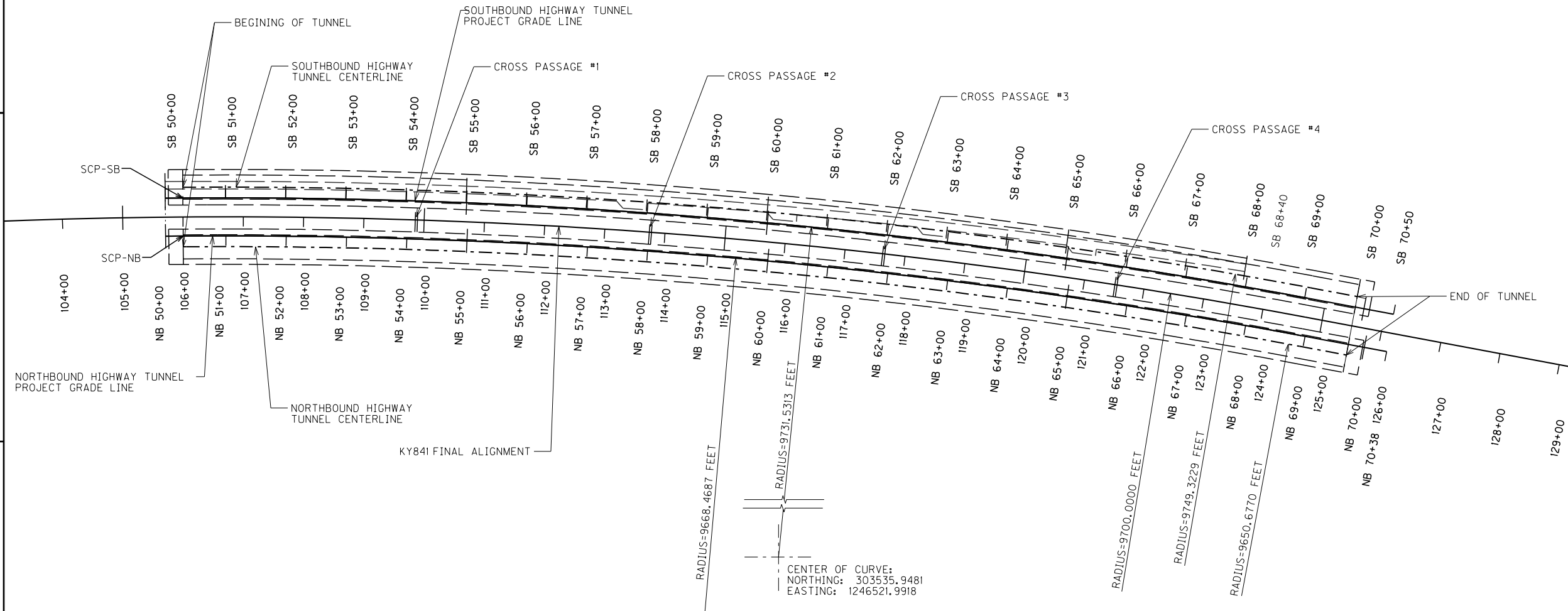
USER: wanglin
 DATE: 12/9/2011
 FILE NAME: G006.dgn
 DRAWING NO.: G-006

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-007	JEFFERSON		



NOTES:
 1. EQUATIONS BETWEEN BORE CENTERLINES AND MAINLINE CENTERLINE WILL BE FINALIZED DURING FINAL DESIGN PHASE D UPON FINALIZATION OF HIGHWAY ALIGNMENT STATIONS.

PROJECT NO.	26225
DESIGNED BY	DATE
DRAFTED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE



PRELIMINARY – NOT FOR CONSTRUCTION
 0' 50' 100' 200' 300'
 SCALE: 1"=100'-0"

DATE	NO.	REVISION	APPR.
	0	-	

CURVE DATA:
 KY 841 ALIGNMENT
 PC STA.: 82+14.14
 PI STA.: 104+48.98
 PT STA.: 126+18.87
 CENTER OF CURVE:
 NORTHING: 303469.0898
 EASTING: 1246642.4197

CURVE DATA:
 NORTHING: 303535.9481
 EASTING: 1246521.9918

CURVE DATA:
 NORTHBOUND HIGHWAY
 TUNNEL ALIGNMENT
 PC STA.: NB 50+00.00
 PI STA.: NB 59+49.94
 PT STA.: NB 68+93.81
 CENTER OF CURVE:
 NORTHING: 303582.3190
 EASTING: 1246564.7309

CURVE DATA:
 SOUTHBOUND HIGHWAY
 TUNNEL ALIGNMENT
 PC STA.: SB 50+00.00
 PI STA.: SB 59+56.14
 PT STA.: SB 69+06.16
 CENTER OF CURVE:
 NORTHING: 303524.6482
 EASTING: 1246508.0029

	STATIONS	
	NB	SB
BEGINNING OF TUNNEL	50+29.14	50+29.33
CROSS PASSAGE #1	54+16.61	54+19.33
CROSS PASSAGE #2	58+04.09	58+09.33
CROSS PASSAGE #3	61+91.56	61+99.33
CROSS PASSAGE #4	65+79.03	65+89.33
END OF TUNNEL	69+73.05	69+85.41

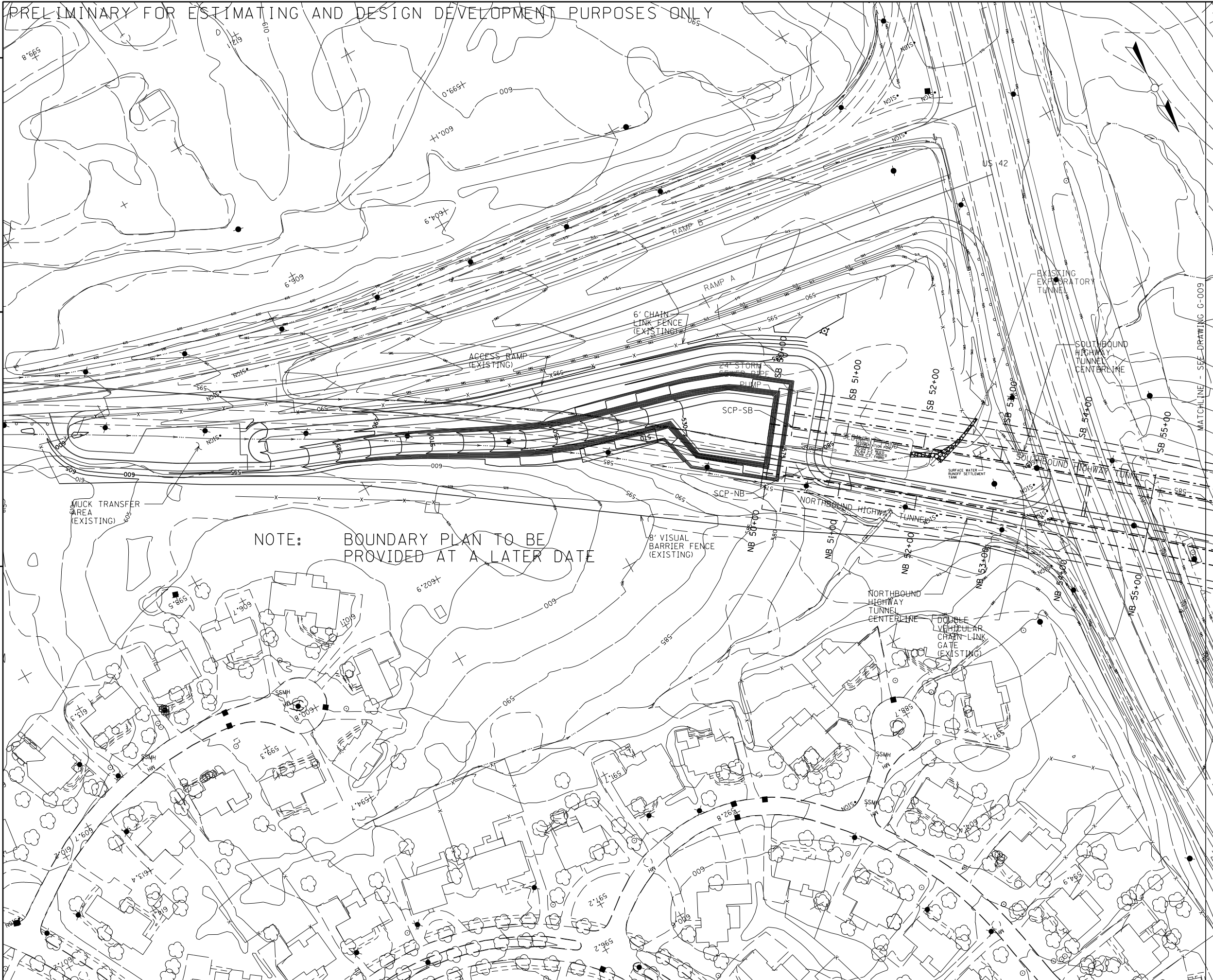
USER: wangjin
 DATE: 12/9/2011
 FILE NAME: G007.dgn
 DRAWING NO.: G-007

HIGHWAY TUNNEL STATIONING
 GENERAL PLAN

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-008	JEFFERSON		

PROJECT NO.	DATE
26225	
DESIGNED BY	DATE
DRAFTED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE



PRELIMINARY - NOT FOR CONSTRUCTION
 0' 30' 60' 120' 180'
 SCALE: 1"=60'-0"

DATE	NO.	REVISION	APPR.
	0		

SITE BOUNDARY PLAN
 1 OF 3

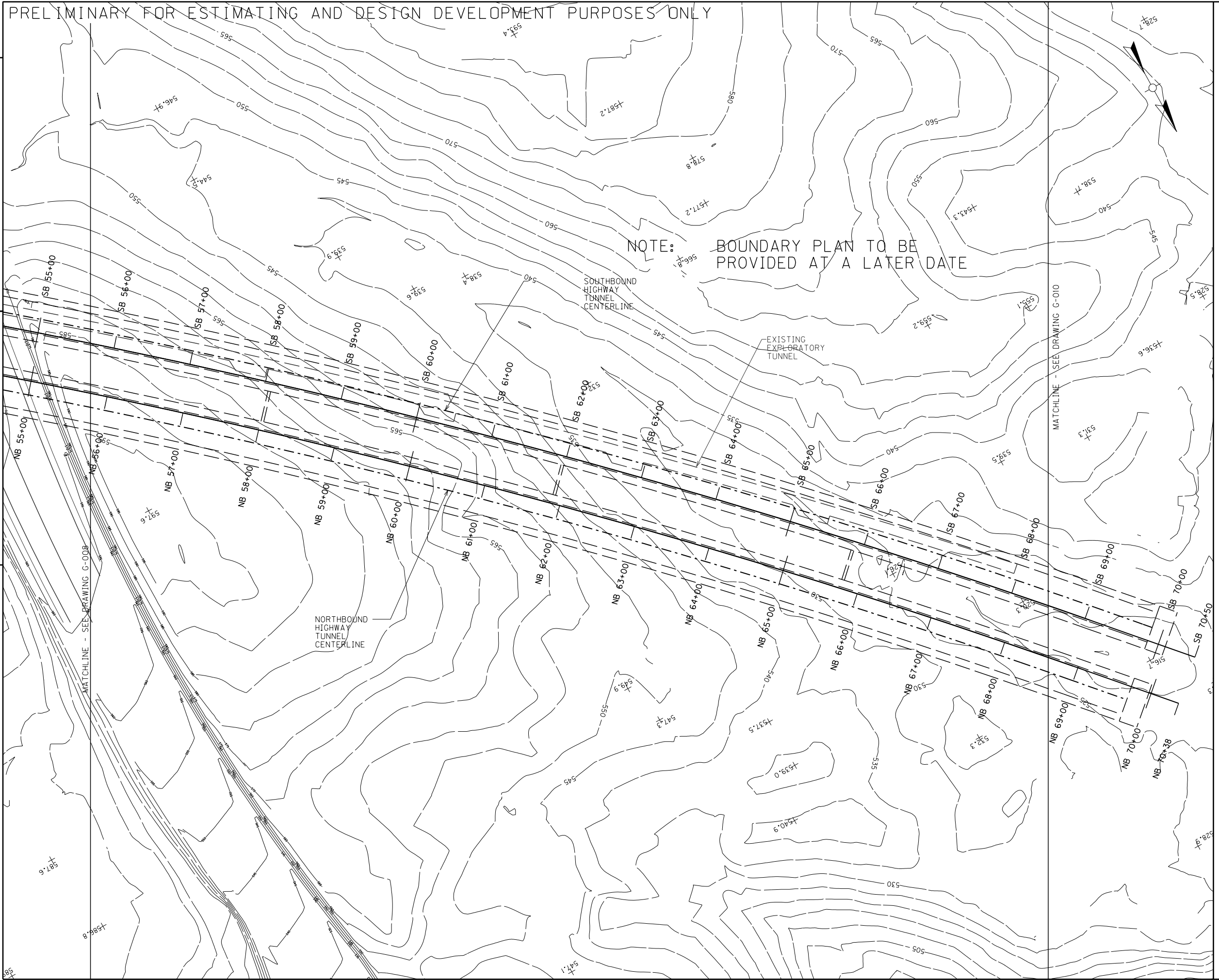
USER: wangjin
 DATE: 12/9/2011
 FILE NAME: G008.dgn
 DRAWING NO.: G-008

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-009	JEFFERSON		

PROJECT NO.	DATE
DESIGNED BY	DATE
DRAFTED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: G009.dgn
 DRAWING NO.: G-009



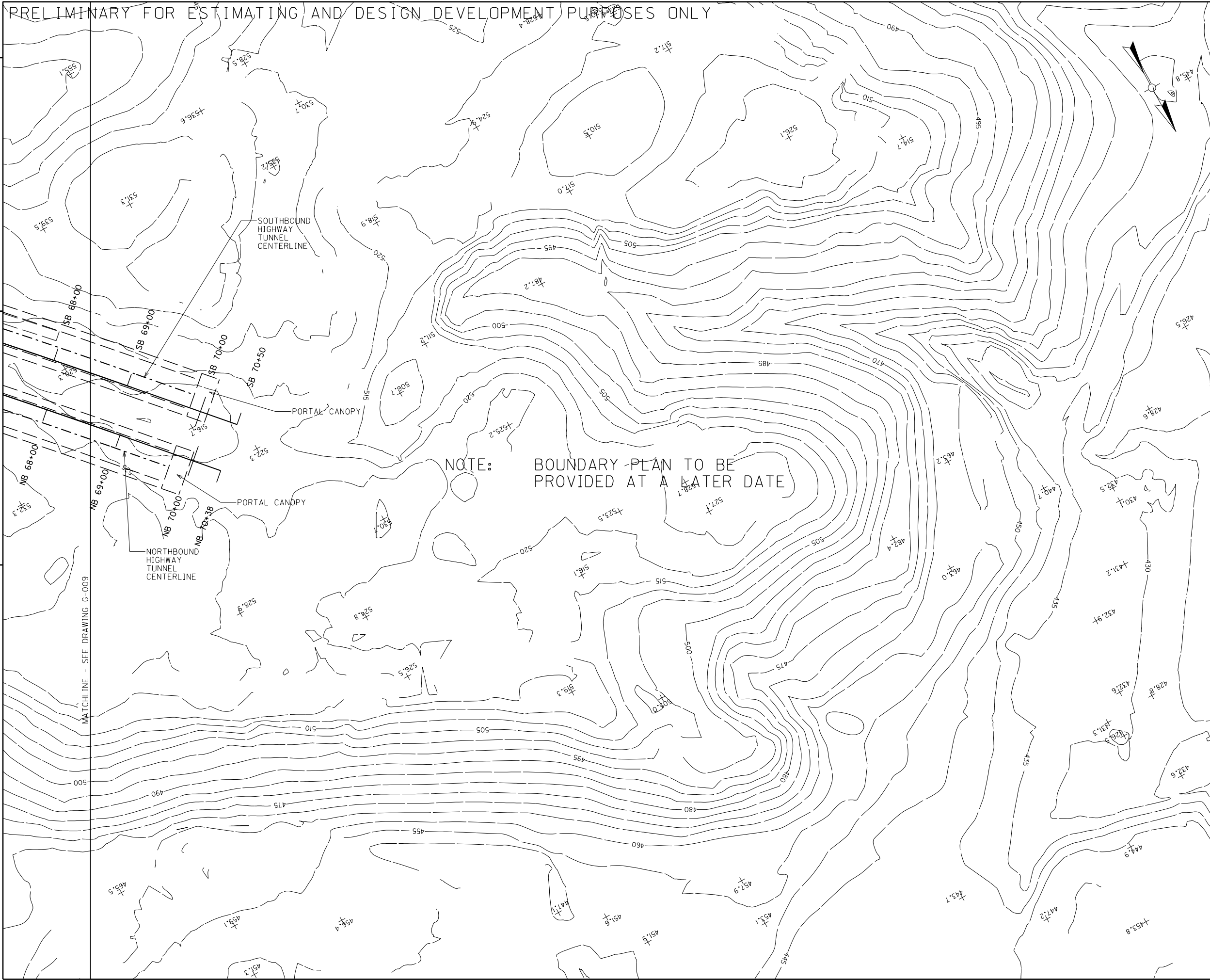
PRELIMINARY - NOT FOR CONSTRUCTION
 0' 30' 60' 120' 180'
 SCALE: 1"=60'-0"

DATE	NO.	REVISION	APPR.
	0		

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-010	JEFFERSON		

PROJECT NO.	DATE
DESIGNED BY	
DRAFTED BY	
CHECKED BY	
APPROVED BY	



NOTE: BOUNDARY PLAN TO BE PROVIDED AT A LATER DATE

PRELIMINARY — NOT FOR CONSTRUCTION
 0' 30' 60' 120' 180'
 SCALE: 1"=60'-0"

DATE	NO.	REVISION	APPR.
	0	-	

SITE BOUNDARY PLAN
 3 OF 3

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: G010.dgn
 DRAWING NO.: G-010

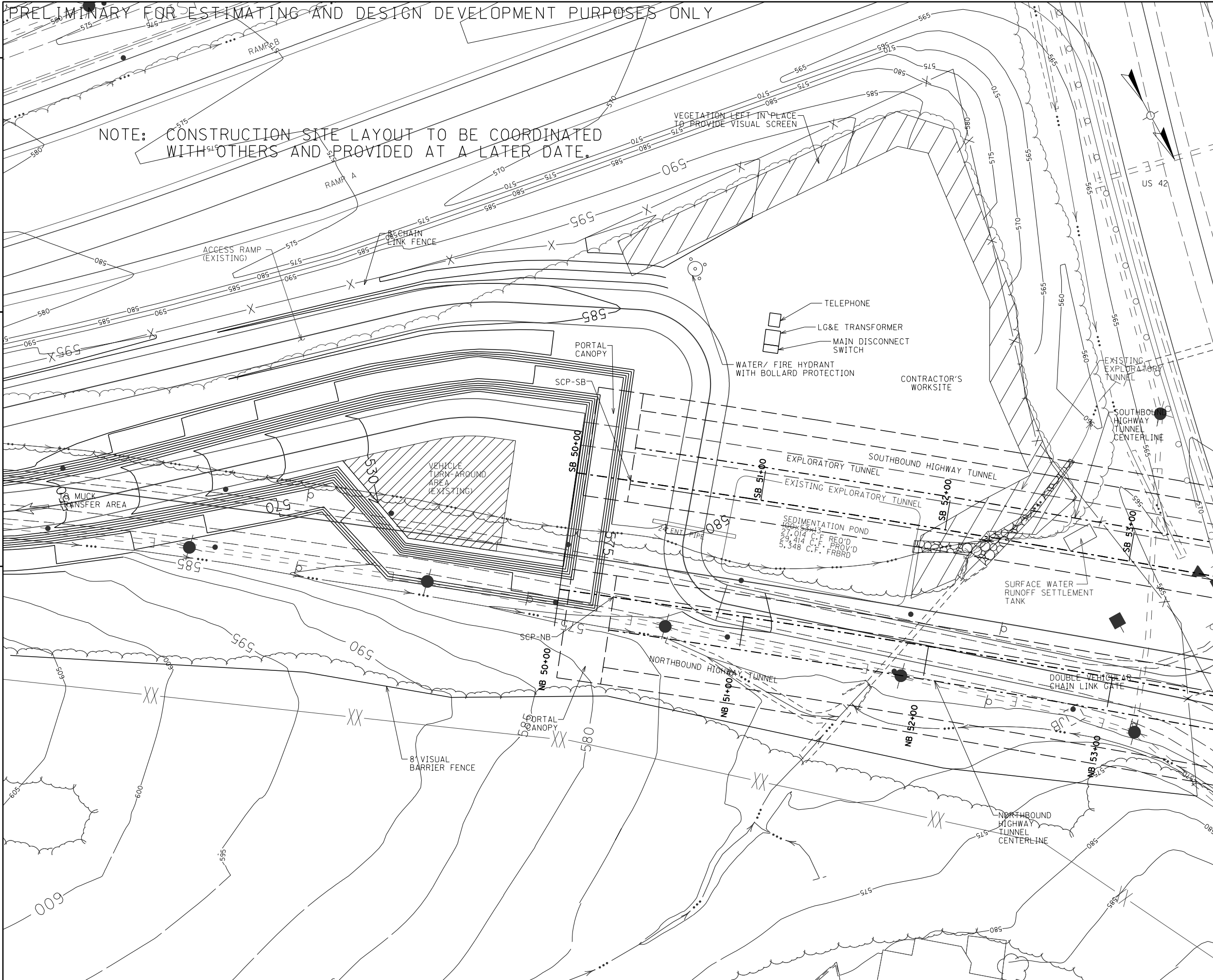
MATCHLINE - SEE DRAWING G-009

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-011	JEFFERSON		

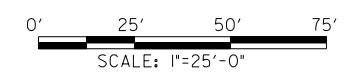
PROJECT NO. 26225
 DESIGNED BY _____ DATE _____
 DRAFTED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

NOTE: CONSTRUCTION SITE LAYOUT TO BE COORDINATED WITH OTHERS AND PROVIDED AT A LATER DATE.



- NOTES:
- GROUND CONTOURS WITHIN SITE LIMIT ARE OMITTED FOR CLARITY.
 - SITE LAYOUT IS SCHEMATIC AND CONTRACTOR IS TO PROVIDE FINAL LAYOUT BASED ON HIS MEANS AND METHODS.

PRELIMINARY - NOT FOR CONSTRUCTION



DATE	NO.	REVISION	APPR.
	0	-	

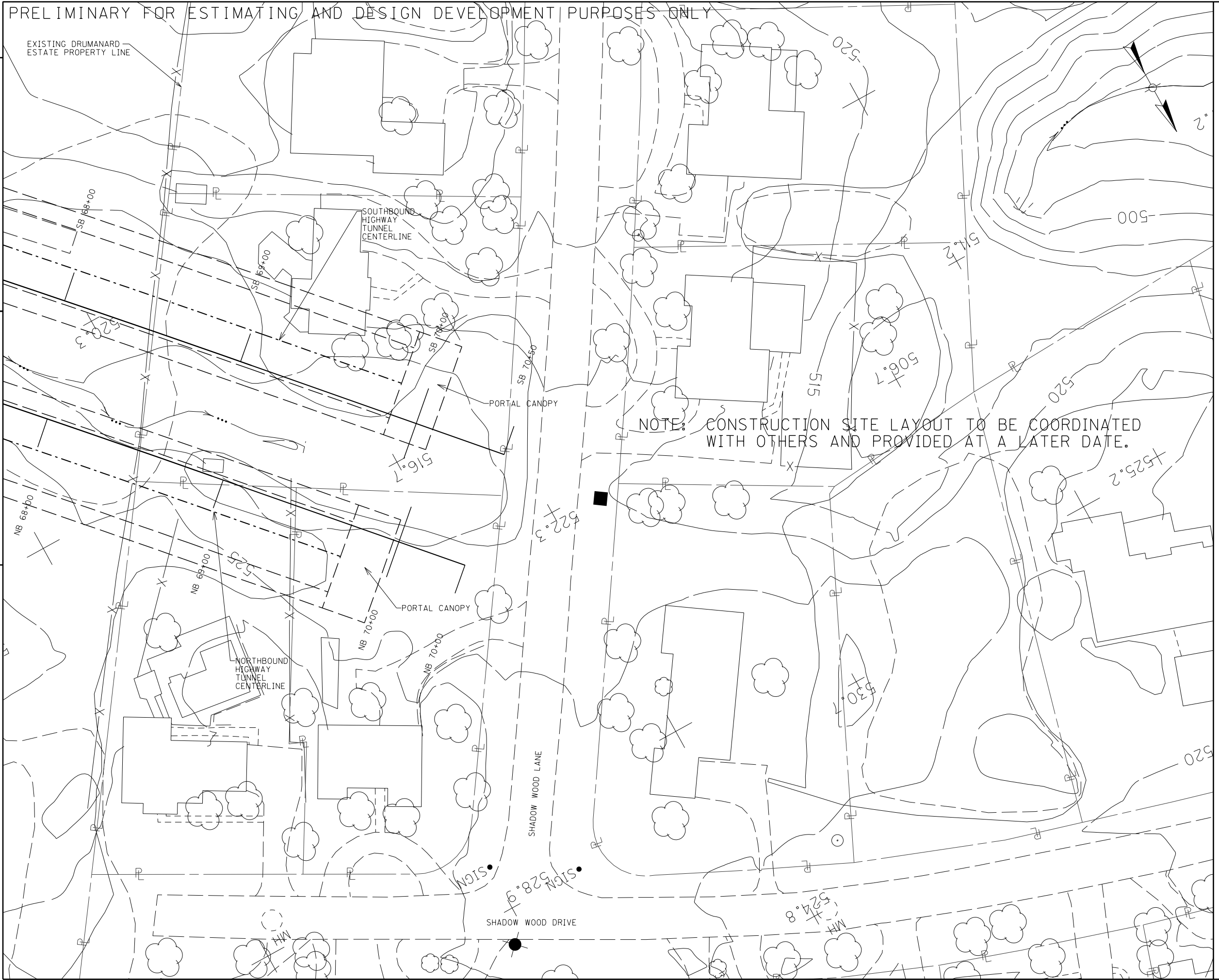
SCHEMATIC CONSTRUCTION SITE LAYOUT
 SOUTH PORTAL

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: G011.dgn
 DRAWING NO.: G-011

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-012	JEFFERSON		

PROJECT NO.	DATE
26225	
DESIGNED BY	DATE
DRAFTED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE



NOTE: CONSTRUCTION SITE LAYOUT TO BE COORDINATED WITH OTHERS AND PROVIDED AT A LATER DATE.

PRELIMINARY — NOT FOR CONSTRUCTION
 0' 25' 50' 75'
 SCALE: 1"=25'-0"

DATE	NO.	REVISION	APPR.
	0	-	

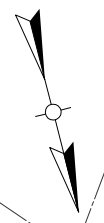
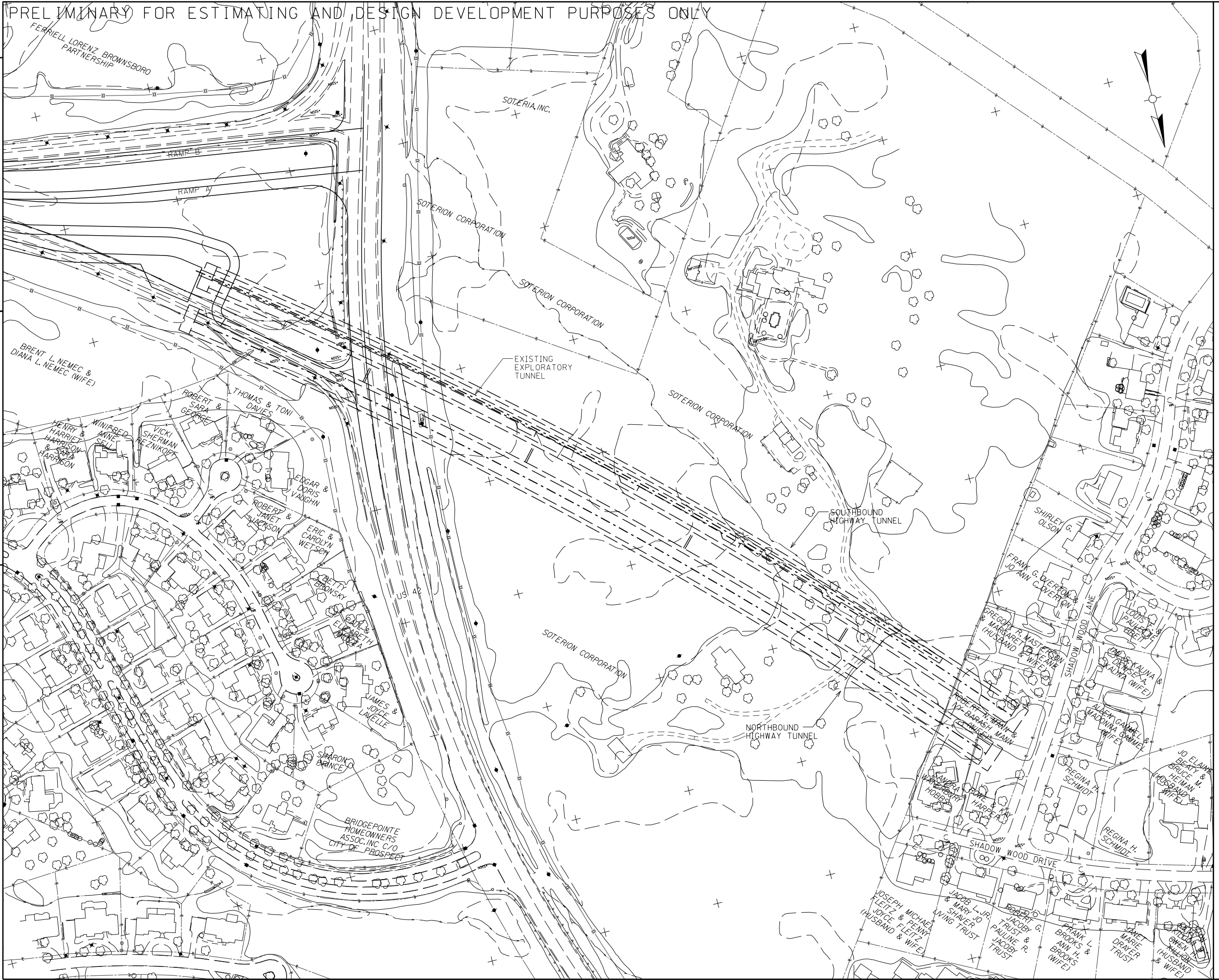
SUGGESTED CONSTRUCTION SITE LAYOUT
 NORTH PORTAL

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: G012.dgn
 DRAWING NO.: G-012

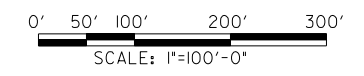
PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
G-013	JEFFERSON		

PROJECT NO. 26255
 DESIGNED BY D. O'Neill DATE 7/19/06
 DRAFTED BY D. Jovier DATE 7/19/06
 CHECKED BY D. Watson DATE 7/19/06
 APPROVED BY R. Blanchard DATE 7/19/06



PRELIMINARY - NOT FOR CONSTRUCTION



DATE	NO.	REVISION	APPR.
	0		

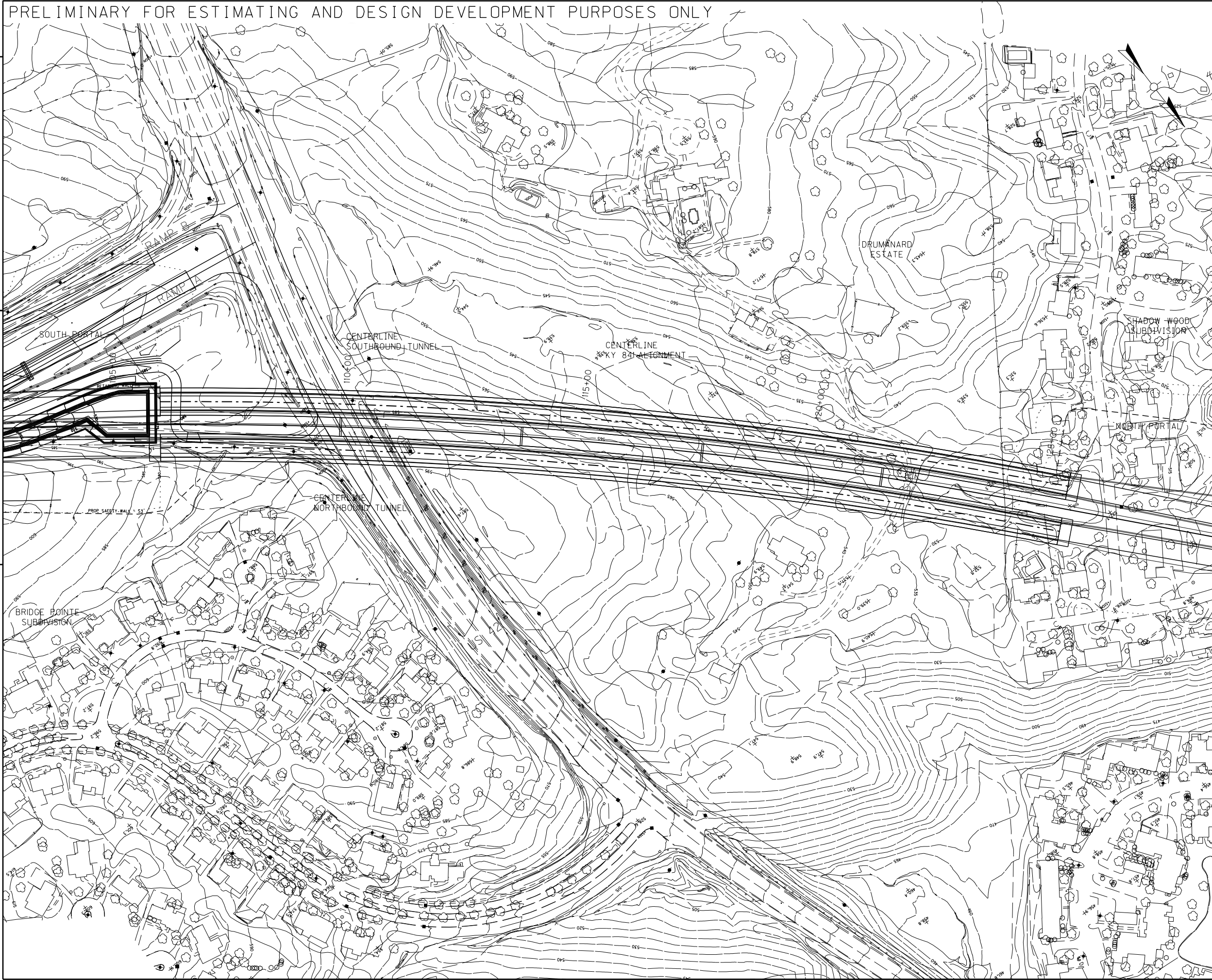
PROPERTY LINES AND PROPERTY OWNERS

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: G013.dgn
 DRAWING NO.: G-013

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

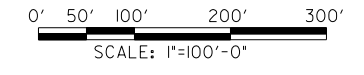
DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
S-001	JEFFERSON		

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____
 PROJECT NO. 26225
 DESIGNED BY J. Prado DATE _____



- NOTES:
- SEE DRAWINGS S-002 FOR SOUTH PORTAL PLAN AND DRAWINGS S-003 THROUGH S-007 FOR REINFORCEMENT.
 - SEE DRAWINGS S-008 FOR NORTH PORTAL PLAN AND DRAWINGS S-009 THROUGH S-013 FOR REINFORCEMENT

PRELIMINARY – NOT FOR CONSTRUCTION



DATE	NO.	REVISION	APPR.
	0		

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY OF
JEFFERSON

PROJECT _____
 NUMBERS: _____

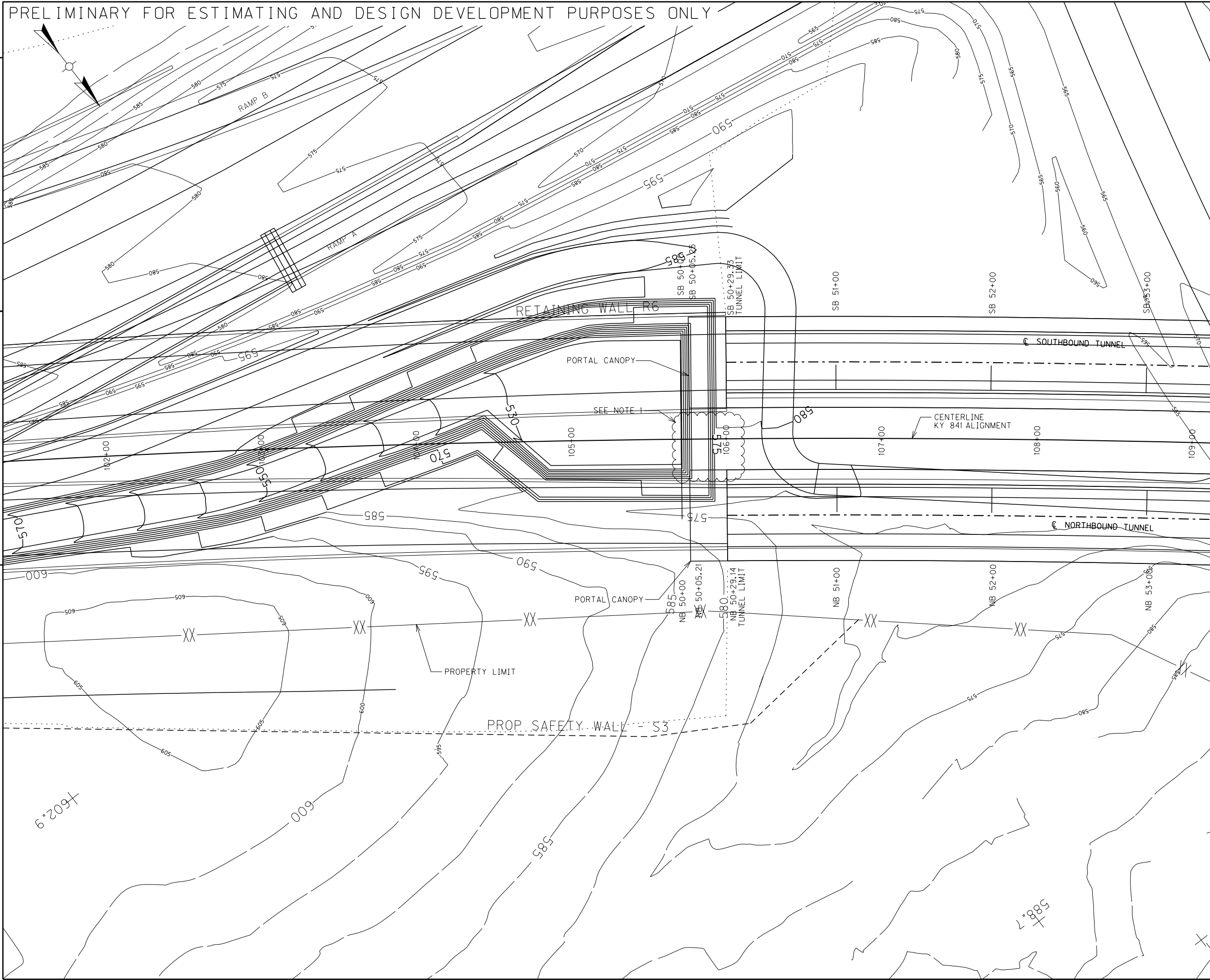
HIGHWAY TUNNELS
 PLAN VIEW

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: S001.dgn
 DRAWING NO.: S-001

PRELIMINARY FOR ESTIMATING AND DESIGN DEVELOPMENT PURPOSES ONLY

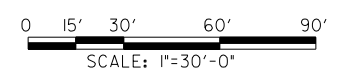
DRAWING NO.	COUNTY OF	ITEM NO.	SHEET NO.
S-002	JEFFERSON		

PROJECT NO. 26225
 DESIGNED BY J. PRADA
 PREPARED BY D. JAVIER
 CHECKED BY D. WATSON
 APPROVED BY R. BLANCHARD
 DATE _____ DATE _____ DATE _____



- NOTES:
- SEE DRAWING A-002 FOR SOUTH PORTAL ELECTRICAL EQUIPMENT COMPLEX.
 - FOR INSTRUMENTATION REFER TO DRAWING IM-004.
 - SITE ACCESS TO BE COORDINATED AND PROVIDED AT A LATER DATE.

PRELIMINARY - NOT FOR CONSTRUCTION



DATE	NO.	REVISION	APPR.
	0	-	
SOUTH PORTAL PLAN			

USER: wanglin
 DATE: 12/9/2011
 FILE NAME: S002.dgn
 DRAWING NO.: S-002