

Exception Request No.: 36
Section: WBR3
Town: Campton
Highway: US 3 (Tier 2)
Station: 2201+84 to 2203+00±
Drawing No.: WBR3 C185
Survey Report Cross Reference No.: WBR3 C181
Exception Type: Alignment in Pavement

Traffic Information

NHS: No
ADT: 1300
Traffic Control Type: Alt 1-way
Traffic Control Duration: Traffic control duration is estimated to be 6 days for the proposed installation. If the requested exception is not granted, NPT expects an additional 6 days of traffic control to install the alignment outside the paved area (not including the installation of the new guardrail).

Summary of Justification for Exception

NPT is requesting an exception from the UAM guidelines for the location of the cable trench in the pavement on US 3, Daniel Webster Highway from STA 2201+84 to 2203+00± of the NPT WBR3 Underground Alignment. (See Exhibit A.) Due to limited ROW space outside the pavement and behind the existing guardrail, construction outside the guardrail is not feasible because NPT does not have the necessary property rights to construct outside the NHDOT ROW on private property. The proposed alignment is located beneath the pavement at a 5-foot offset from the guardrail consistent with NHDOT's request to avoid future conflicts with guardrail repairs or replacement or disruption to the existing guardrail system.

NPT also evaluated the feasibility of constructing outside the pavement if the guardrail and a portion of the roadway were temporarily removed to allow construction of the ductbank in the slope without extending past the right of way limits for benching. NPT determined that the traffic impacts of this construction method are materially greater than the proposed installation.

Technical Discussion of Justification of Exception

The 116-foot alignment in the roadway at this location is constrained by guardrail on the eastern side of US 3 where there are moderate to steep slopes on the outside of the guardrails. Consequently, the steep slopes behind the guardrail, combined with NHDOT's requested offset of 5-feet from the existing guardrail, would result in significant constructability issues, including the need for benching into the side slope to create a level and safe working area. The modified side slopes would extend beyond the ROW limits. (See Exhibit B.)

NPT also evaluated placing the cable trench alignment on the western side of the highway, but there are construction constraints on the western side of the road. These constraints include a concrete headwall and steep slopes. (See Exhibit A.) In addition, moving the alignment to the western side of the road would require two additional highway crossings. The road crossings would disturb approximately 100 feet of paved roadway, for the purpose of avoiding impacts to a 116-foot section on the eastern side of

the road, a trade-off that provides virtually no net benefit in terms of avoiding impacts to paved areas. In addition, the benefits, if any, of moving to the opposite side of the road are negated by additional traffic impacts and delays associated with the construction of the two road crossings.

Excavation limits and work areas are shown on the attached drawings. During construction, one lane will remain open to traffic at all times.

At the request of the DOT, we also evaluated an option to remove the guardrail and a portion of the roadway to allow NPT to construct the ductbank in the slope on the east side without extending past the right of way limits. Considerable amounts of materials would have to be removed and transported to another site for temporary storage in order to bench into the slope. These materials would then have to be transported back to the site to restore the site after the ductbank was completed. (See Exhibit C.) This option would increase the time necessary in the NH DOT ROW required to construct the ductbank. Therefore, traffic impacts would be greater for this option (as compared to the proposed installation) due to the additional work for the benching activities, and NPT is not proposing this alternative.

Additionally, NPT has liability concerns regarding DOT's request that NPT install new guardrails after completion of its work. Unlike NHDOT, if NPT were to install new guardrails, NPT would not have the benefit of immunity protections afforded to NHDOT under New Hampshire law. See N.H. R.S.A. § 230:80. Therefore, NPT could not agree to have any role in work to replace the guardrails unless NHDOT were willing to agree to defend, indemnify, and hold harmless NPT against any and all claims related in any manner to, or arising out of, the installation of the new guardrails. If NHDOT were not willing to provide such protection to NPT, then NPT would be willing, in the alternative, to reimburse NHDOT for the cost NHDOT and/or its contractors incur to replace any guardrails removed during our work, but NPT could not have any role in such work. However, NPT is not requesting the "guardrail replacement option" at this location, due to the additional traffic impacts.

Impacts

The design, as proposed, will not adversely affect the design, construction, stability, traffic, safety, environmental commitments, maintenance, or operation of the highway. The alignment has been located 5-feet off the edge of the guardrail, to avoid future conflicts with guardrail repairs or replacement or disruption to the existing guardrail system. The installation of the ductbank and pavement restoration will be designed and constructed in accordance with conditions outlined in the NHDOT's April 3, 2017 letter to the New Hampshire Site Evaluation Committee. The installation's proposed depth meets NHDOT's criteria relating to the structural box to minimize any potential conflicts with maintenance and future highway projects. A traffic control plan has been submitted to the NHDOT for this design and complies with the Manual on Uniform Traffic Control Devices.

Supporting Documentation

See attached Exhibits A, B, and C showing a plan, profile, and sections for the proposed installation and alternatives.

N/F
LOOK REV TRUST AUG 94
2008 & 2014 US RT 3
TMP# 9-7-15
DB 3374 PG 453

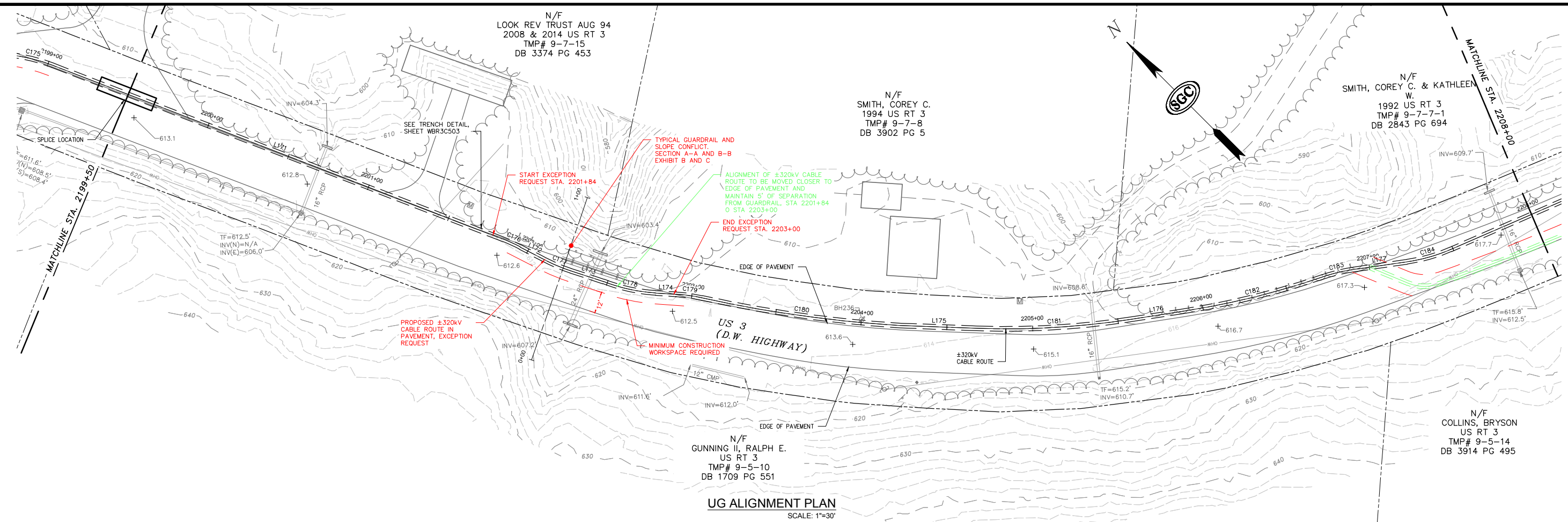
N/F
SMITH, COREY C.
1994 US RT 3
TMP# 9-7-8
DB 3902 PG 5

N/F
SMITH, COREY C. & KATHLEEN
W.
1992 US RT 3
TMP# 9-7-7-1
DB 2843 PG 694

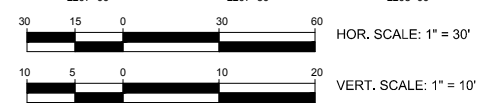
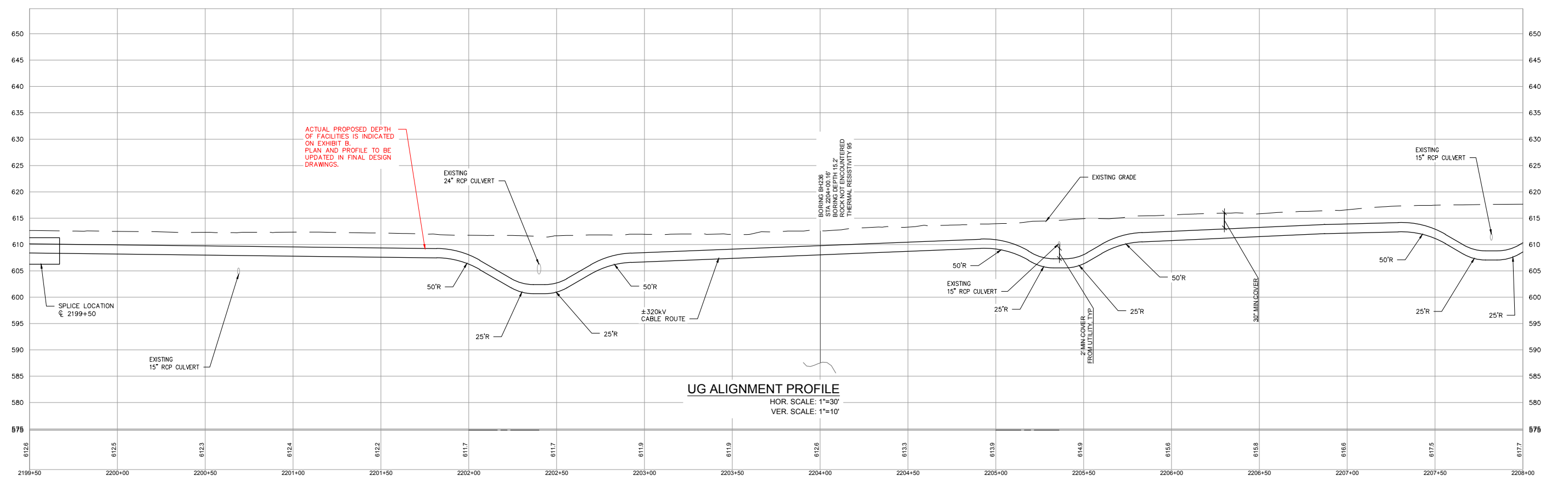
N/F
GUNNING II, RALPH E.
US RT 3
TMP# 9-5-10
DB 1709 PG 551

N/F
COLLINS, BRYSON
US RT 3
TMP# 9-5-14
DB 3914 PG 495

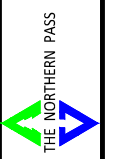
UG ALIGNMENT PLAN
SCALE: 1"=30'



UG ALIGNMENT PROFILE
HOR. SCALE: 1"=30'
VER. SCALE: 1"=10'



NO.	EXCEPTION	REQUEST	REVISION	DATE	DRWN	CHKD	APPR.
0							



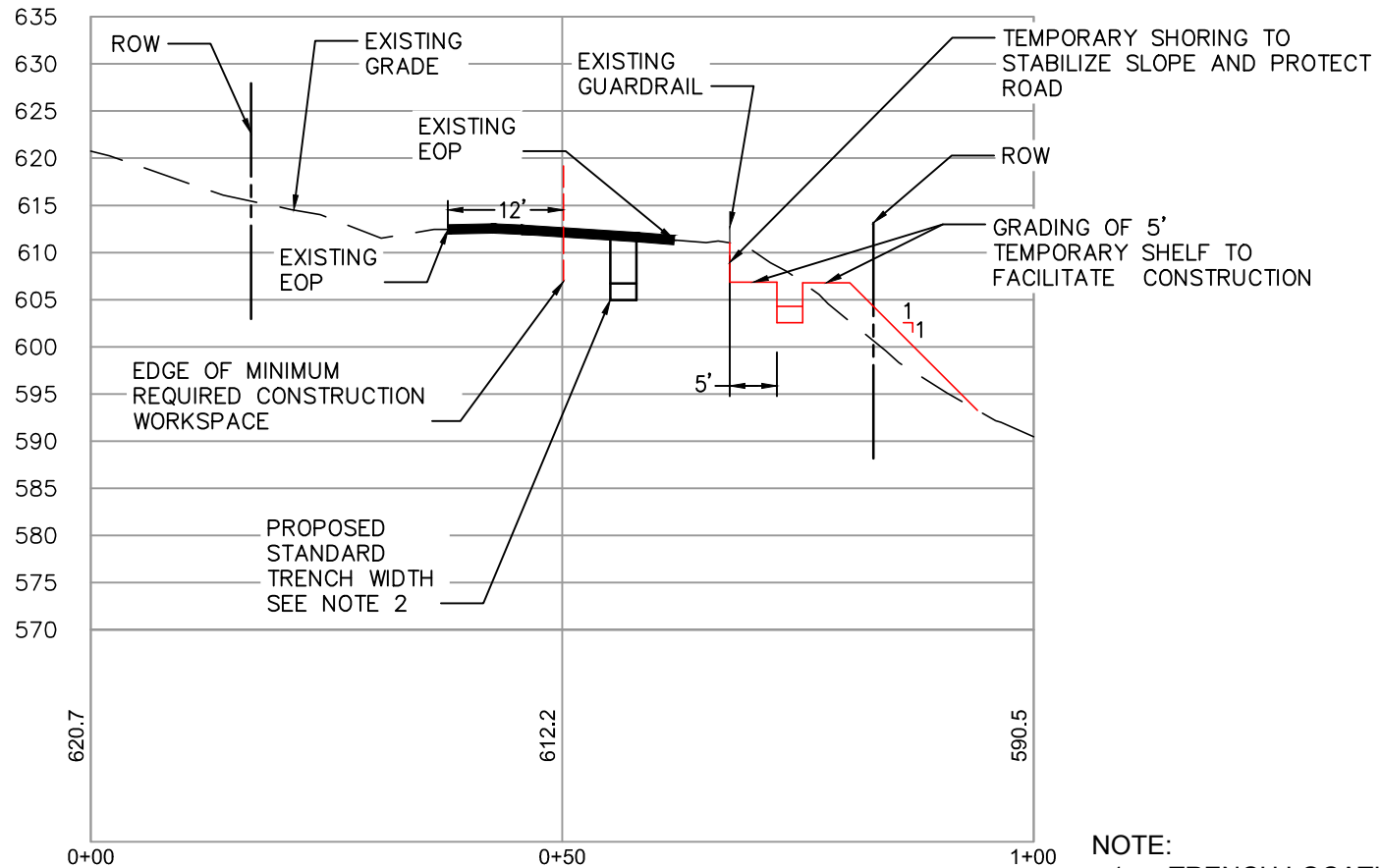
Transmission Business

EXCEPTION 36 - ALIGNMENT IN PAVEMENT
NPT WBR3 - UNDERGROUND ALIGNMENT
WBR3 SECTION - STA 2201+84 TO 2203+00
SCALE:

DES: MHR | CHECK: JCB
DRW: MRS | APR: TMH
TOWN: CAMPTON

TRANSMISSION LINE:
WBR3

EXHIBIT A

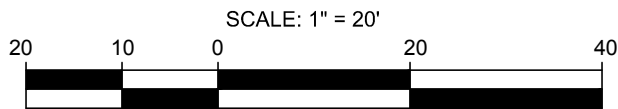


NOTE:

1. TRENCH LOCATION SHOWN IN RED IS NOT PROPOSED AND ONLY INTENDED TO DEMONSTRATE CONSTRUCTABILITY ISSUES.
2. TRENCH WIDTH SHOWN TO BE MAINTAINED USING TRENCH JACKS AND SHEETING

SECTION A-A

SCALE: 1"=20'



JOB NO.: 1384001

TITLE:
 EXCEPTION 36 - ALIGNMENT IN PAVEMENT
 NPT-WBR3 UNDERGROUND ALIGNMENT
 WBR3 SECTION-STA 2201+84 TO STA 2203+00±
 TOWN: CAMPTON

PREPARED FOR:
 NH DOT
 7 HAZEN DRIVE
 CONCORD, NH

REVISIONS:

NO.	DATE	EXCEPTION REQUEST
0	05/16/2017	

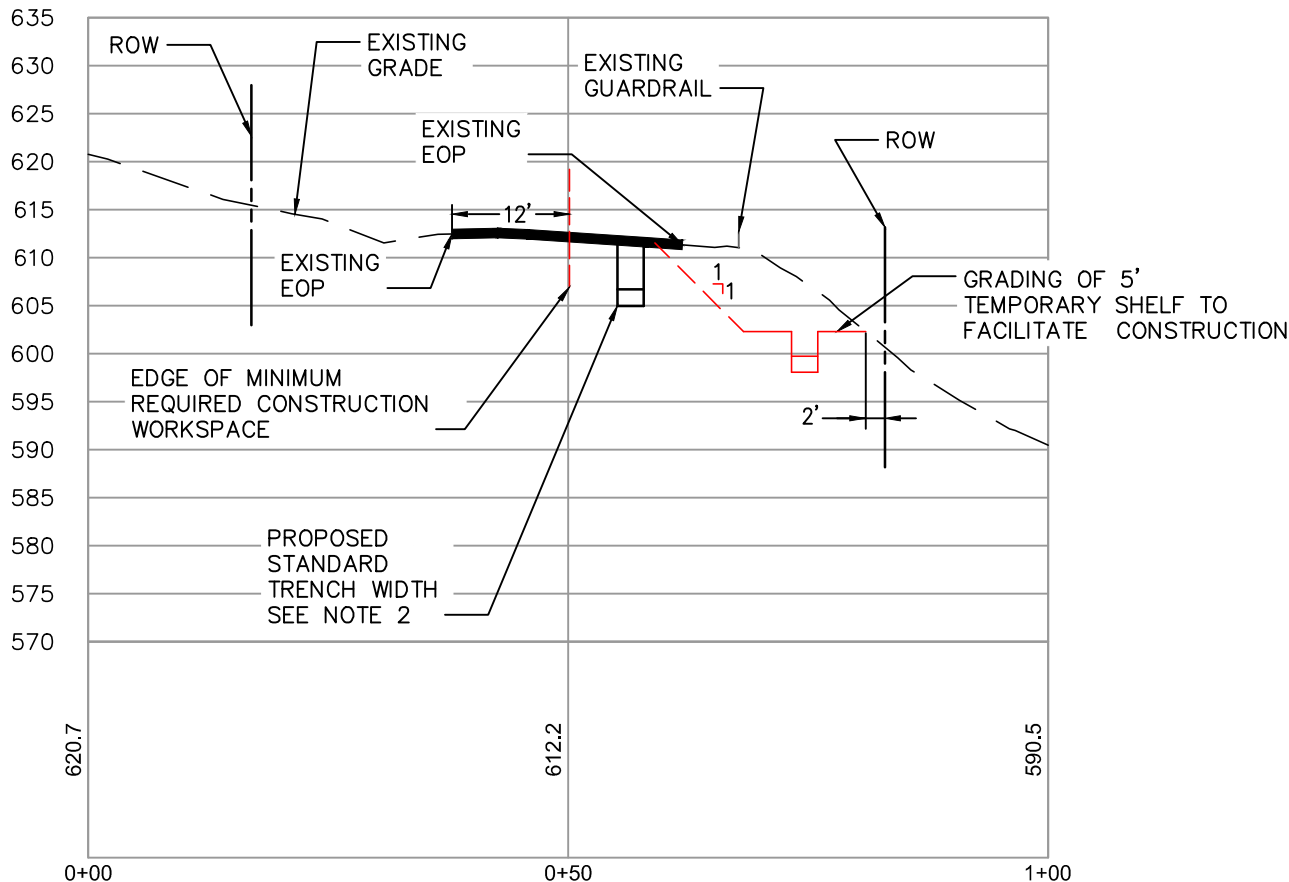


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EXHIBIT NO.: B DATE: 05/2017 DRAWN: CHP SCALE: 1" = 20'



GUARDRAIL SECTION

START STATION	END STATION	LENGTH (FT)
2202+20	2202+60	40

ALTERNATE LOCATION CUT VOLUME EVALUATION:

1. GUARDRAIL LENGTH: 40 FT
2. APPROX. CUT AREA: 102 SF
3. APPROX. CUT VOLUME: 4,080 CF (151 CY)

SCALE: 1" = 20'

SECTION B-B

SCALE: 1"=20'



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 Galleria Tower 1, Suite 2475 2700 Post Oak Boulevard Houston, TX 77056

EXHIBIT NO.: C	DATE: 05/2017	DRAWN: CHP	SCALE: 1" = 20'
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