JOINT PUBLIC NOTICE

July 7, 2014

United States Army
Corps of Engineers
New Orleans District
Regulatory Branch
Post Office Box 60267
New Orleans, LA 70160-0267

(504) 862-1879
Project Manager
Ms. Angelle Greer
Permit Application Number
MVN-2014-00920-WMM

State of Louisiana
Department of Environmental Quality
Office of Environmental Services
Post Office Box 4313
Baton Rouge, LA 70821-4313

(225) 219-3225
Project Manager
Elizabeth Johnson
WQC Application Number
WQC 140702-02

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to: [ ] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [X] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344).

Application has also been made to the Louisiana Department of Environmental Quality for a Water Quality Certification (WQC) in accordance with statutory authority contained in LRS 30:2074 A(3) and provisions of Section 401 of the Clean Water Act."

SIDING TRACK EXTENSION AND RUN-THROUGH SLOT IN CALCASIEU PARISH

Name of applicant: Union Pacific Railway Corporation, c/o CH2M Hill, Attn: Angela Dalsis, 14701 St. Mary's Lane, Suite 300, Houston, Texas 77079

Location of work: 30.23799°N, 93.283395°W, in Westlake, Louisiana, in CALCASIEU Parish, as shown on the enclosed drawings.

Character of work: Place approximately 12,737 cubic yards of earthen material, 2,863 cubic yards of subballast, and 1,950 cubic yards of ballast, all to facilitate construction of a siding track extension and run-through slot. Approximately 2.95 acres of unavoidable wetland impacts will be compensated for through the purchase of credits from an approved mitigation bank in the same hydrologic basin (HUC 08080206).

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **20 days** from the date of this joint public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit and/or this WQC request and must be mailed so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be mailed to the Corps of Engineers at the address above**, ATTENTION: REGULATORY BRANCH. Individuals or parties may request an extension of time in which to comment on the proposed work by writing to the project manager or clicking on the project manager's name on the public notice grid on the web page. Any request must be specific and substantively supportive of the requested extension and received by this office prior to the end of the initial comment period. The Section Chief will review the request and the requestor will be promptly notified of the decision to grant or deny the request. If granted, the time extension will be continuous to the initial comment period and, inclusive of the initial comment period, will not exceed a total of 30 calendar days.** Letters concerning the Water Quality Certification must reference the applicant's name and the WQC Application number and be mailed to the Louisiana Department of Environmental Quality at the address above.

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction.

Corps of Engineers Permit Criteria

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, Federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts

of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also
used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New Orleans District is unaware of properties listed on the National Register of Historic Places near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. Copies of this notice are being sent to the State Archeologist and the State Historic Preservation Officer.

Our initial finding is that the proposed work would neither affect any species listed as endangered by the U.S. Departments of Interior or Commerce, nor affect any habitat designated as critical to the survival and recovery of any endangered species.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal would result in the destruction or alteration of 0.0 acre(s) of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

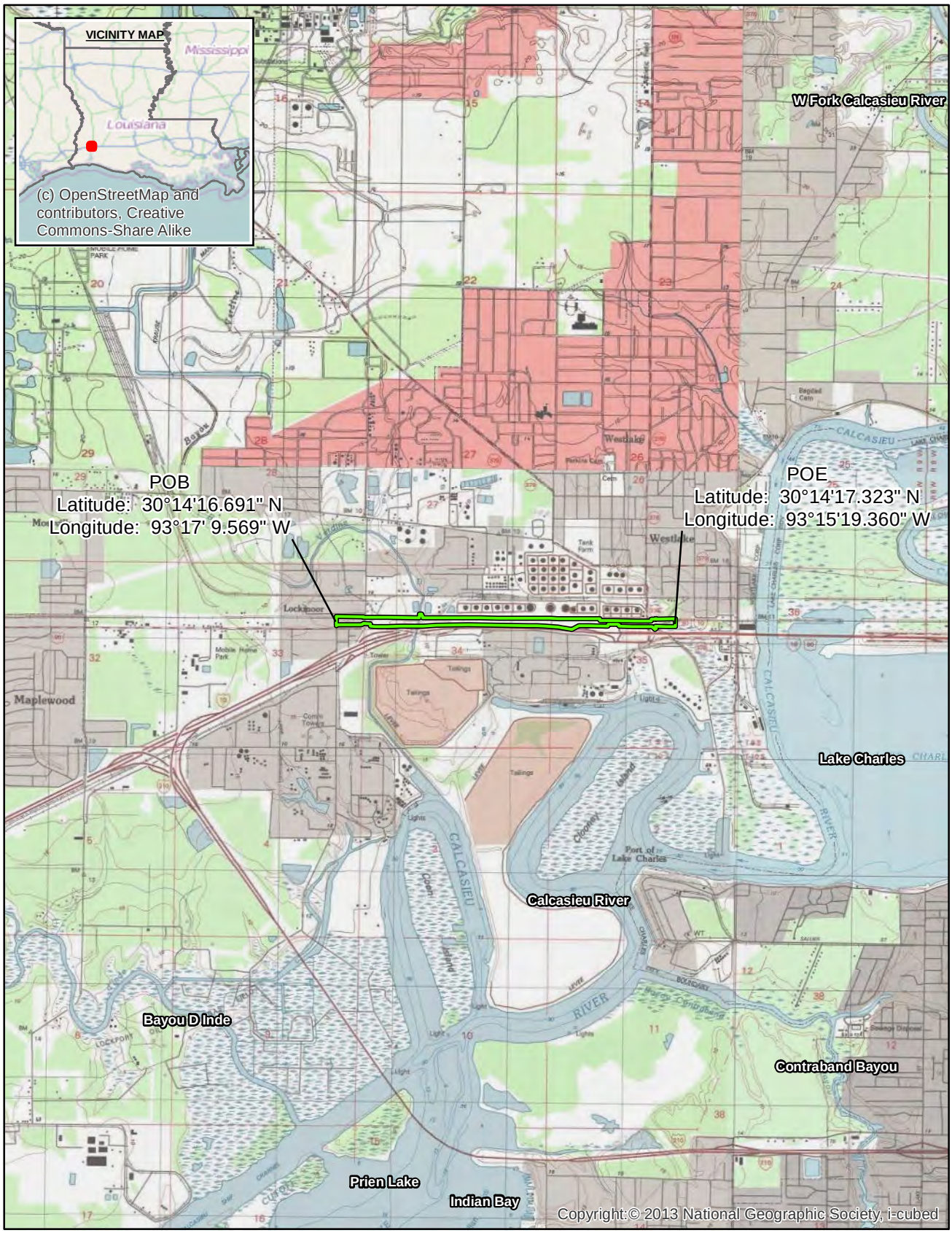
If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the Department of Environmental Quality, Office of Environmental Services before a permit is issued.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

Darrell S. Barbara
Chief, Western Evaluation Section

Enclosures



Date: 3/21/2014

Sheet 1 of 10

Legend

Survey Boundary

0 2,000 4,000
Feet

N

FIGURE 1
Topographic Map
UPRR Calcasieu Run Through Slot

Source: USGS Topo Maps

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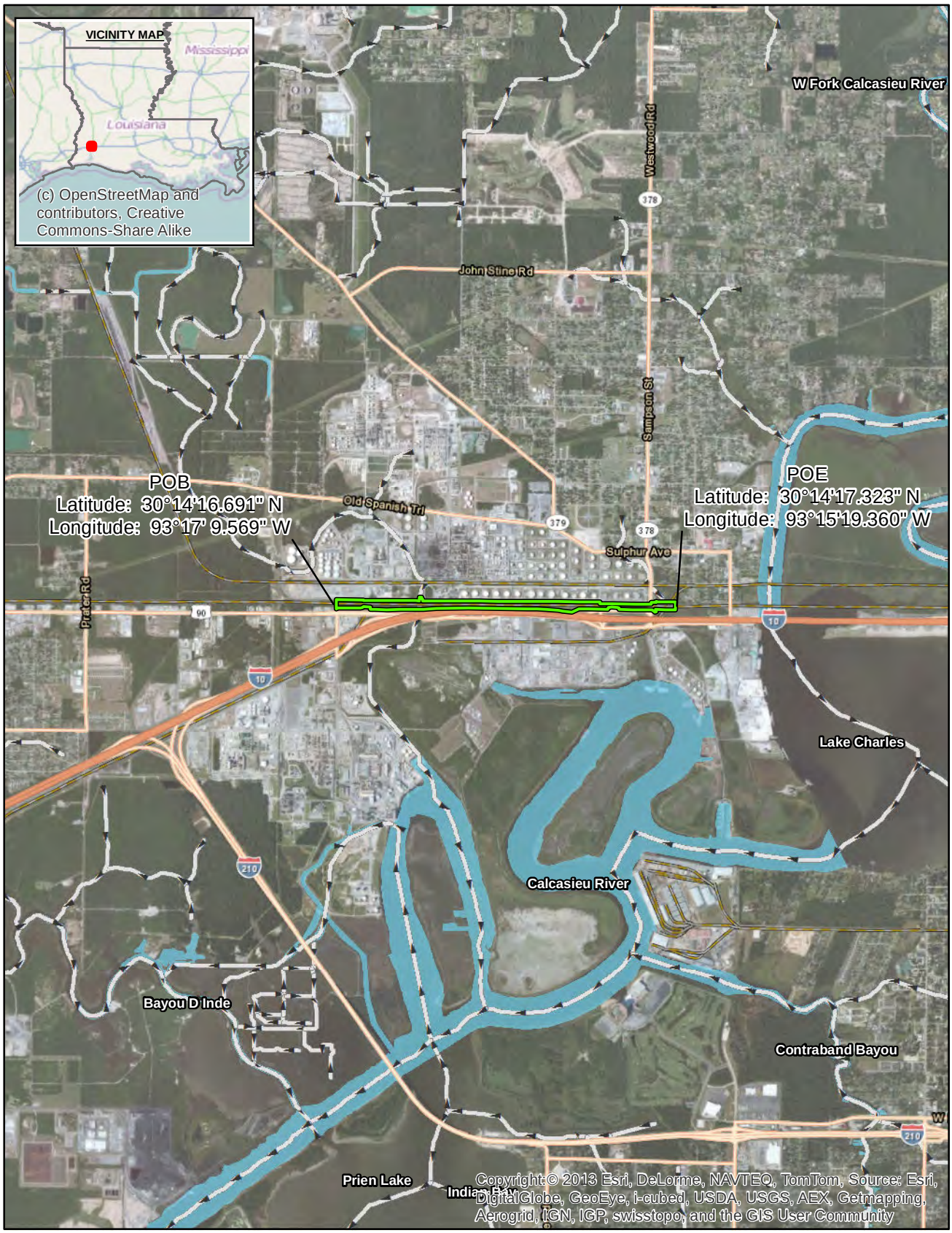

Legend

Date: 3/21/2014

Sheet 2 of 10

Survey Boundary

Flow Line (NHD)

Waterways (NHD)

0 2,000 4,000
Feet

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FIGURE 1
Aerial Vicinity Map
UPRR Calcasieu Run Through Slot

Source: ESRI World Imagery

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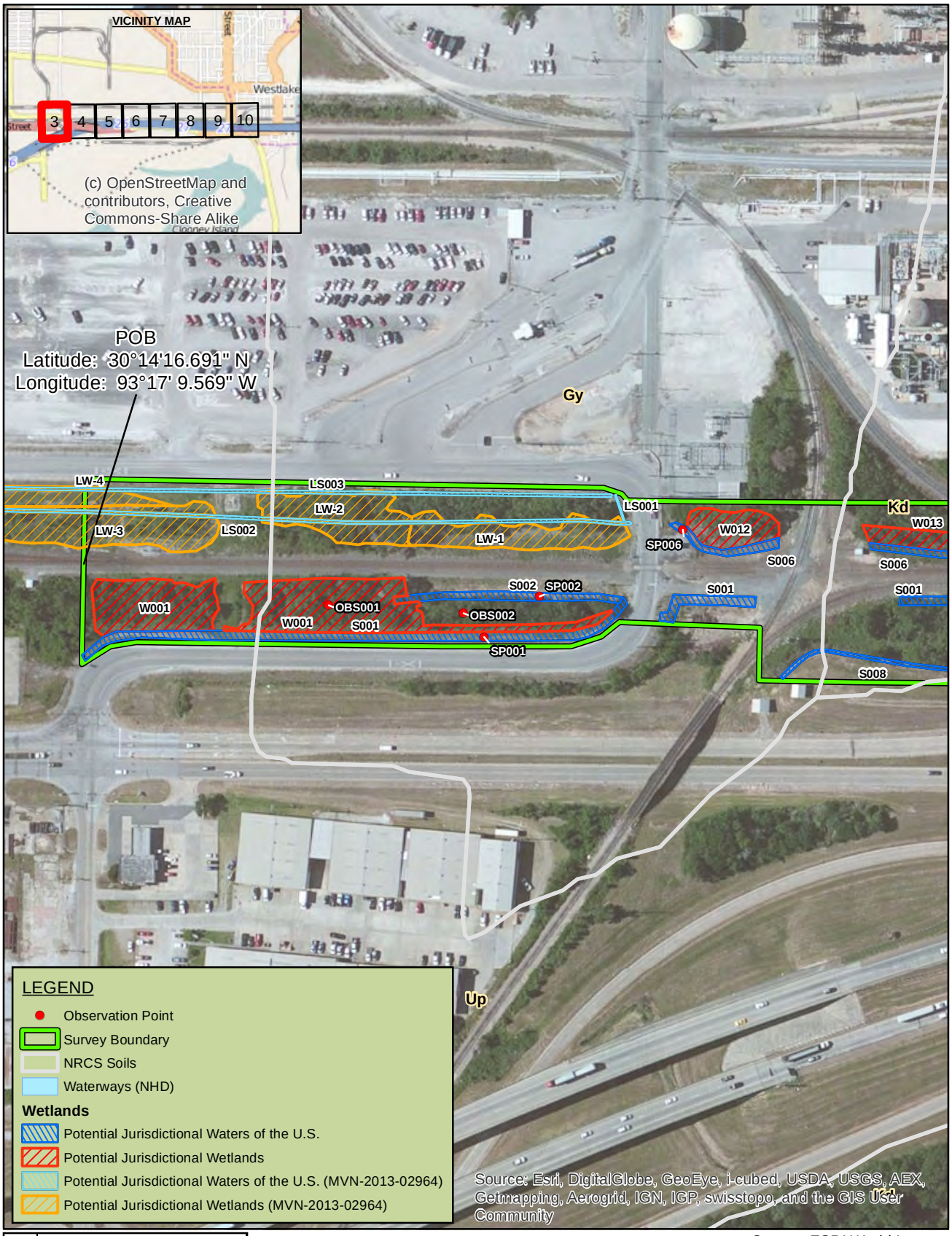

Legend	Soil Series Name
Ac	Acadia silt loam, 1 to 3 percent slopes
AR	Arat mucky silt loam
BB	Basile and Brule, 0 to 3 percent slopes, frequently flooded
Gy	Guyton-Messer silt loams
Kd	Kinder-Messer silt loams
UA	Udifluvents, 1 to 20 percent slopes
Up	Urban land
W	Water

Date: 3/21/2014

Source: ESRI World Imagery

Sheet 3 of 10

0 100 200
Feet

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FIGURE 1
Preliminary Jurisidictional Wetland Map
UPRR Calcasieu Run Through Slot

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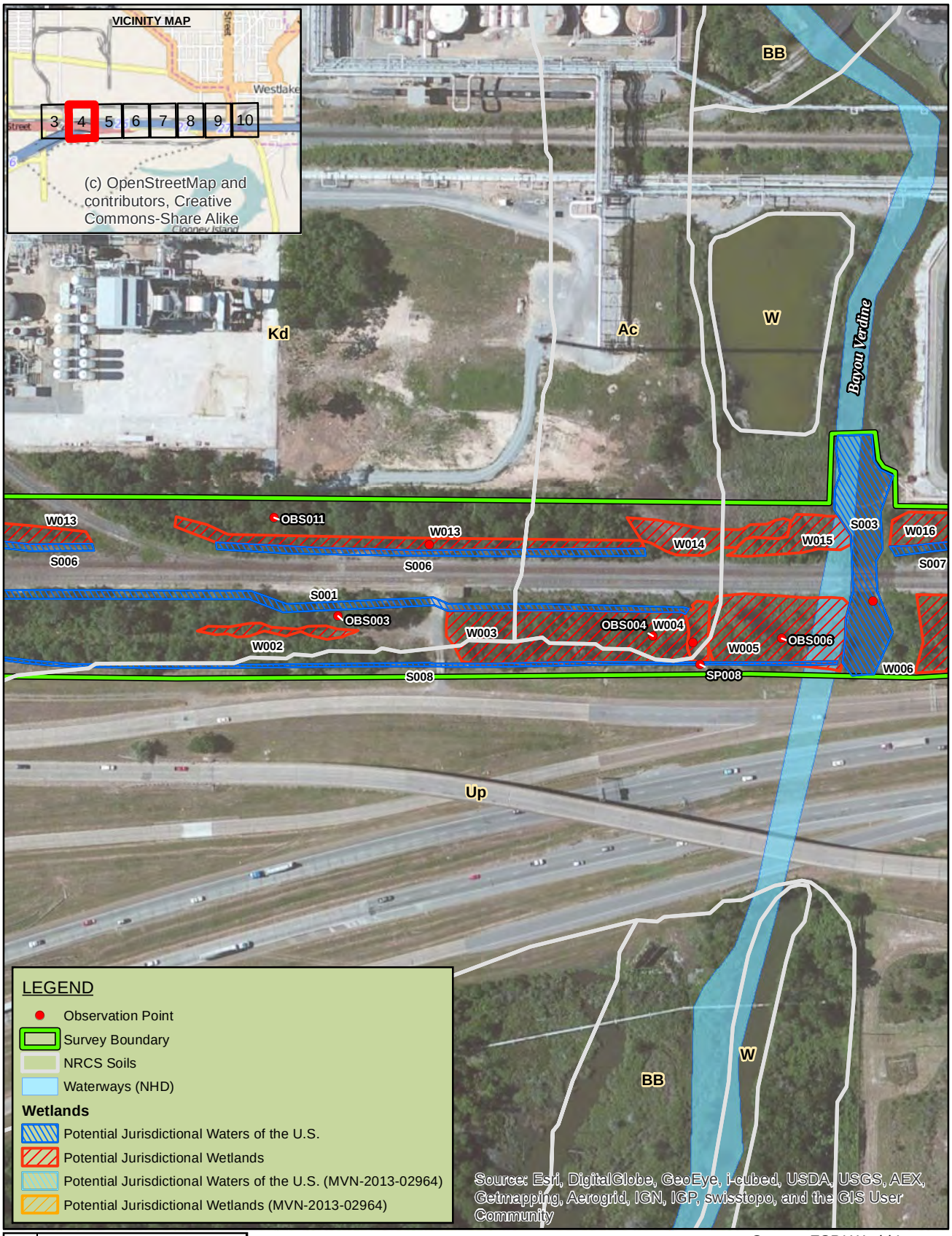

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Date: 3/21/2014

Source: ESRI World Imagery

Sheet 4 of 10

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Feet

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FIGURE 1
Preliminary Jurisidictional Wetland Map
UPRR Calcasieu Run Through Slot

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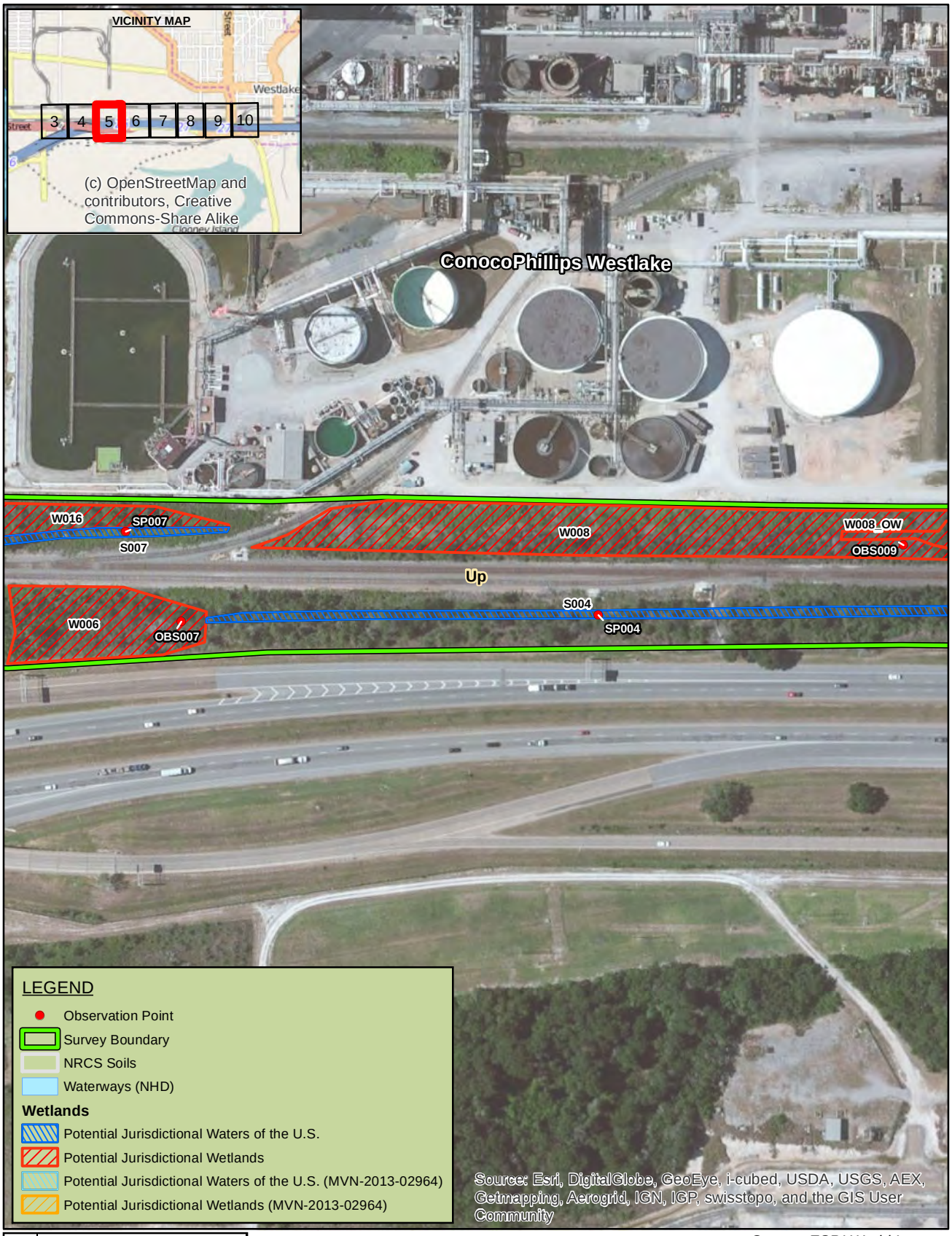

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Date: 3/21/2014

Source: ESRI World Imagery

Sheet 5 of 10

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Feet

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FIGURE 1
Preliminary Jurisidictional Wetland Map
UPRR Calcasieu Run Through Slot

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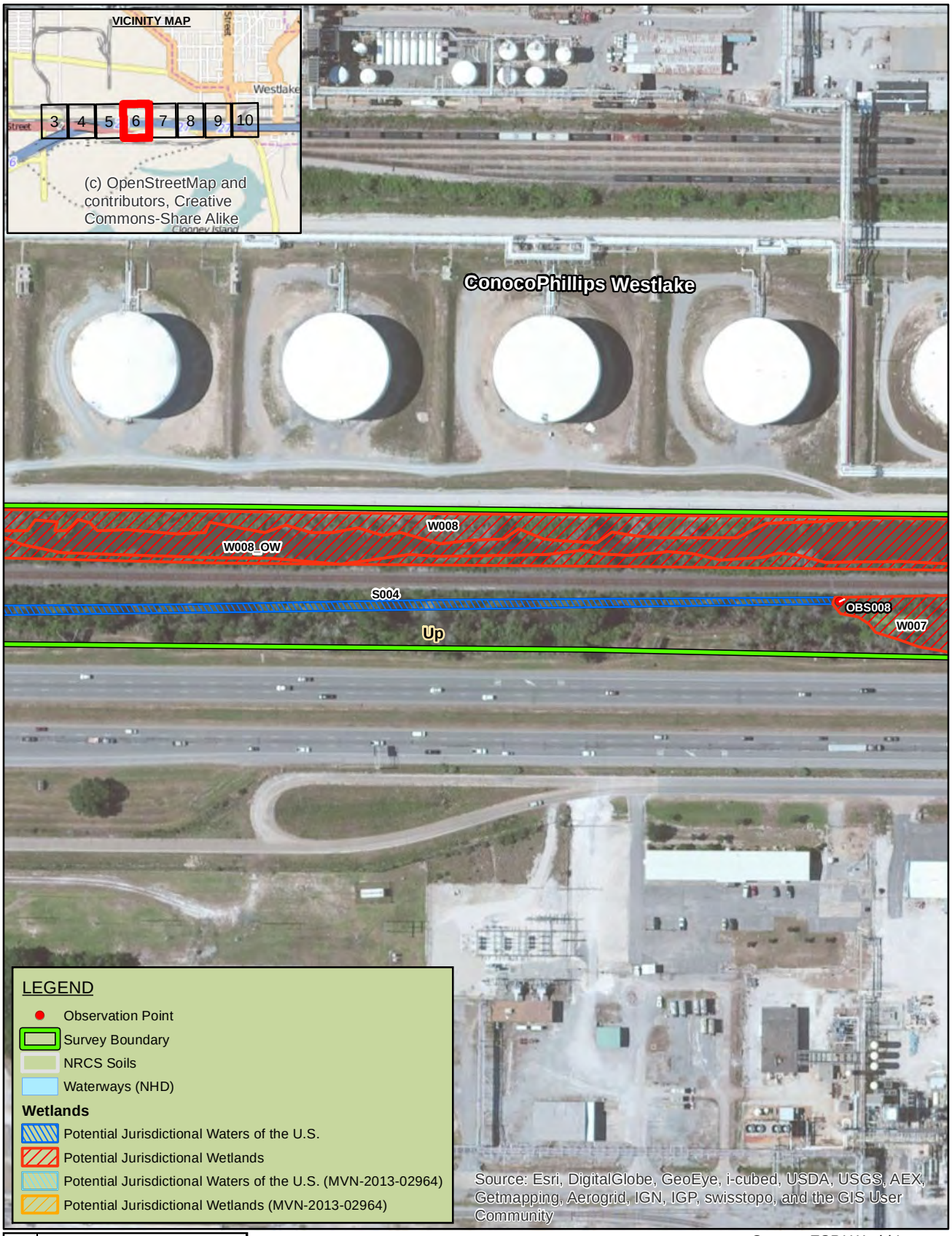

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Date: 3/21/2014

Source: ESRI World Imagery

Sheet 6 of 10

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Feet

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FIGURE 1
Preliminary Jurisidictional Wetland Map
UPRR Calcasieu Run Through Slot

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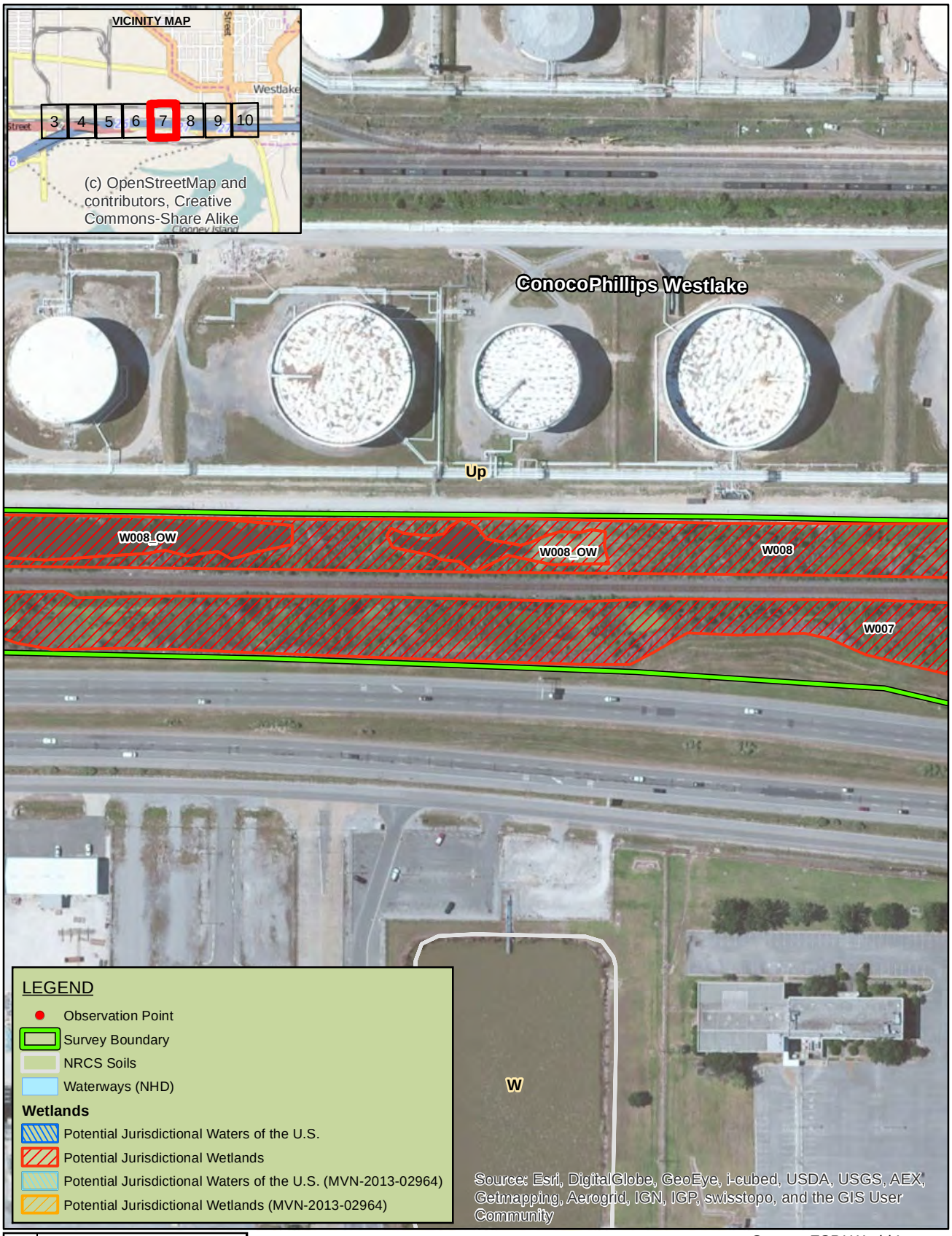

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Date: 3/21/2014

Source: ESRI World Imagery

Sheet 7 of 10

0 100 200
Feet

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FIGURE 1
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UPRR Calcasieu Run Through Slot

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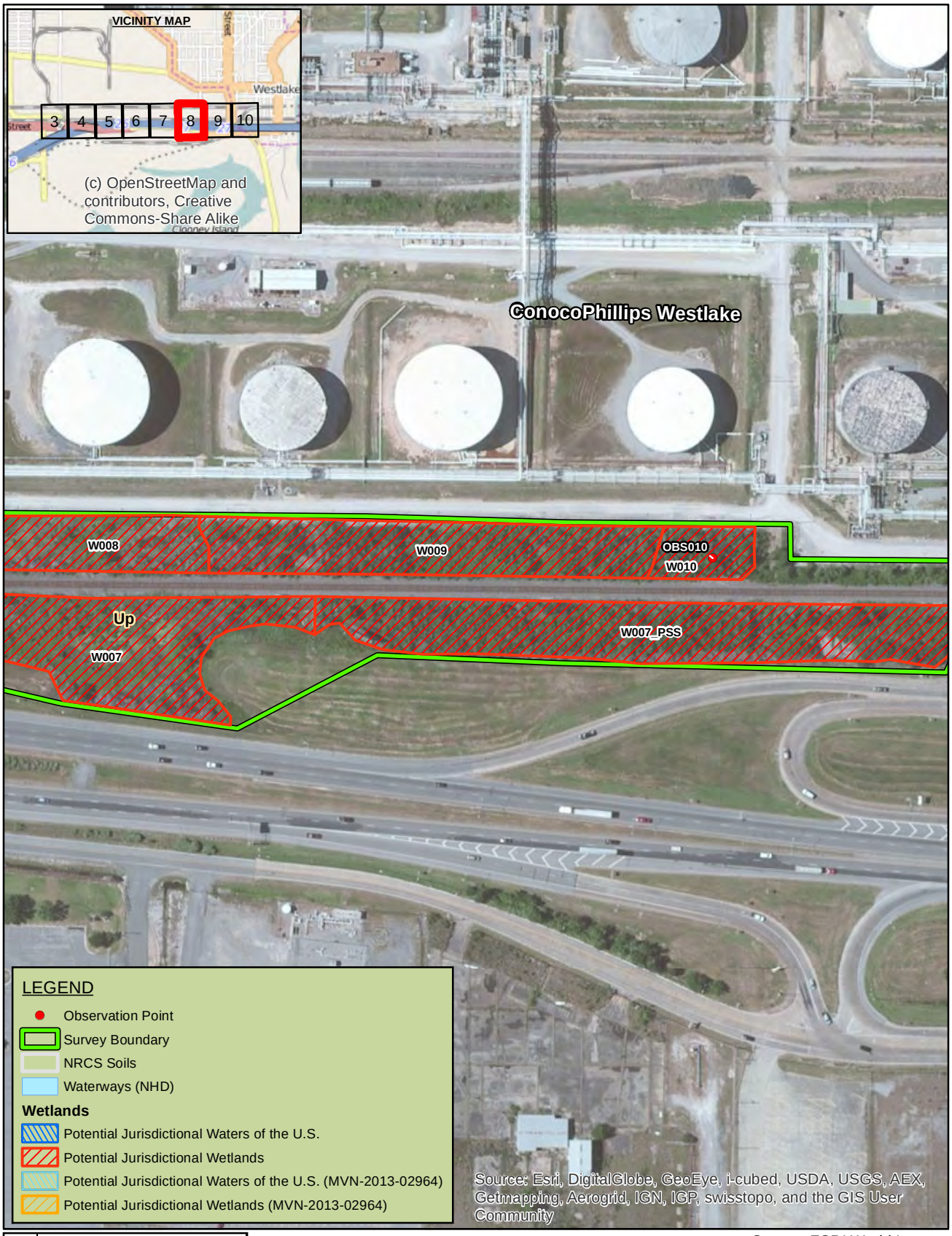

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Date: 3/21/2014

Source: ESRI World Imagery

Sheet 8 of 10

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Feet

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FIGURE 1
Preliminary Jurisidictional Wetland Map
UPRR Calcasieu Run Through Slot

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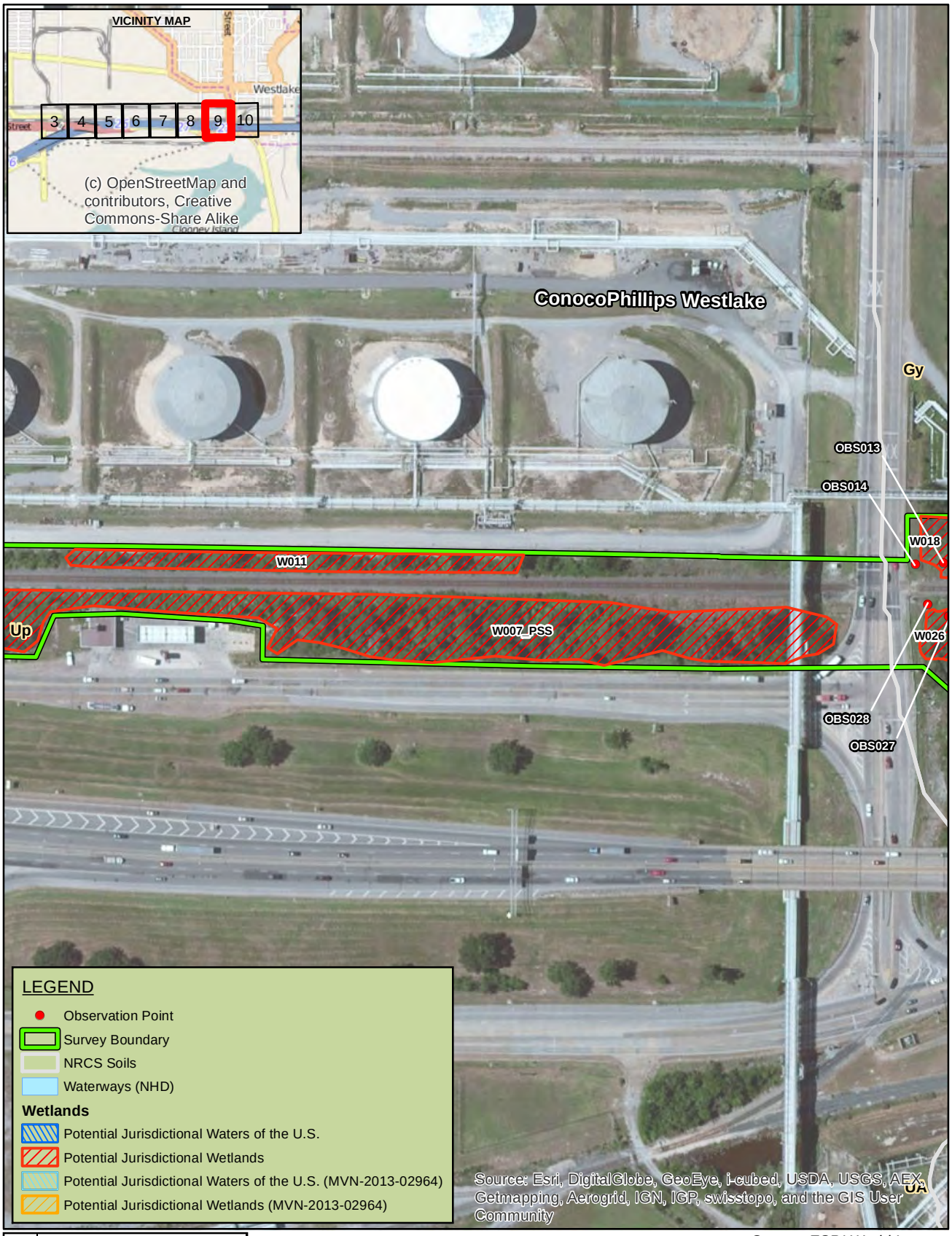

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Date: 3/21/2014

Source: ESRI World Imagery

Sheet 9 of 10

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Feet

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FIGURE 1
Preliminary Jurisidictional Wetland Map
UPRR Calcasieu Run Through Slot

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Kd	Kinder-Messer silt loams
UA	Udifluvents, 1 to 20 percent slopes
Up	Urban land
W	Water

Date: 3/21/2014

Source: ESRI World Imagery

Sheet 10 of 10

0 100 200
Feet

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FIGURE 1
Preliminary Jurisidictional Wetland Map
UPRR Calcasieu Run Through Slot

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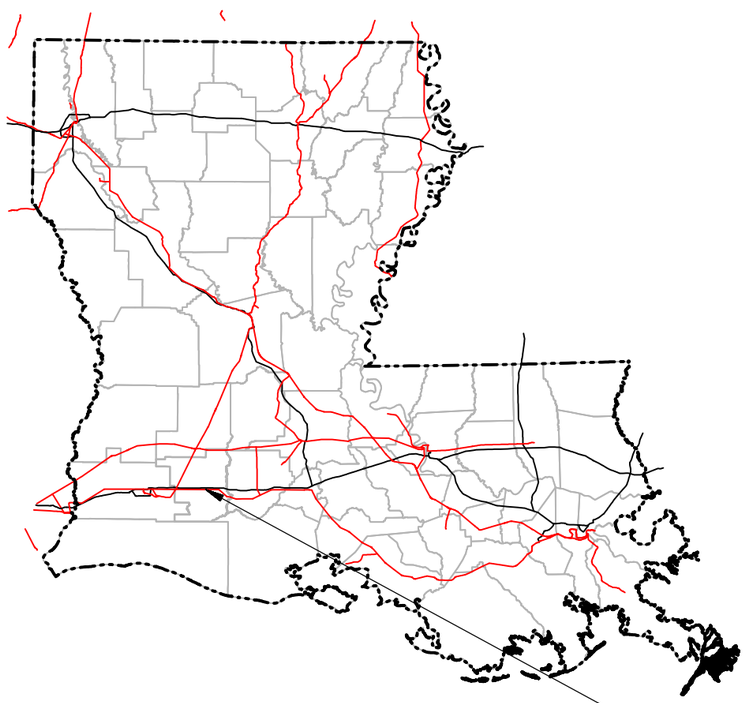
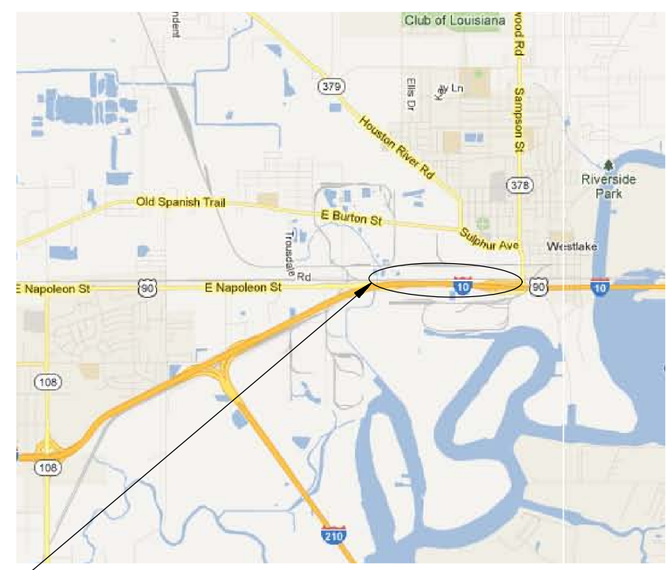
ENGINEERING DESIGN/CONSTRUCTION





PROJECT LOCATION

State of Louisiana

Project Location Map

benesch
engineers · scientists · planners
Alfred Benesch & Company
4633 Washington Road
Kenosha, WI 53144
262-652-6677 Job No. 20152.03

CALCASIEU, LA
LAFAYETTE SUBDIVISION
MP 221.31 - MP 222.92
CALCASIEU RUN-THROUGH SLOT

30% COMPLETE
NOT FOR CONSTRUCTION

WORK ORDER: 17780
PROJECT NUMBER: 79610
BUDGET REFERENCE: 12CP270

LAST REVISED
SEPTEMBER 6, 2013

PROJECT INDEX

PROJECT DESIGN	DESCRIPTION
G001	COVER SHEET WITH VICINITY MAP
G002	PROJECT INDEX & REVISION SHEET
G003	GENERAL NOTES & PROJECT CONTACTS
G004	ABBREVIATIONS & LEGEND
G005	CONTROL POINTS AND GEOMETRY
G006	CURVE DATA
P001 to 007	TRACK PLAN & PROFILE
T001 to 002	TYPICAL SECTIONS
X001 to 027	CROSS SECTIONS

STANDARDS	DESCRIPTION

PROJECT INDEX (CONTINUED)

STRUCTURES DESIGN	DESCRIPTION

MECHANICAL DESIGN	DESCRIPTION

ELECTRICAL DESIGN	DESCRIPTION

PROJECT REVISIONS

REV. #	BY	DATE:	SHEET:	DESCRIPTION

benesch
engineers · scientists · planners
Alfred Benesch & Company
4633 Washington Road
Kenosha, WI 53144
262-652-6677Job No. 20152.03

UNION PACIFIC

DRAWN BY: HRD
CHECKED BY: MJK
DATE: 09/06/13
SHEET NUMBER: G002 of 006

UNION PACIFIC RAILROAD
Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
PROJECT INDEX & REVISIONS

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Default
9/6/2013

GENERAL NOTES

1. Contractors shall notify Service Alert, (800) 642-2444 and UPRR Fiber Optics Hotline (800) 336-9193, 48 hours prior to any excavation. The USA Authorization Numbers shall be kept at the job site.
2. No work whatsoever shall be commenced without first notifying the UPRR Engineer.
3. The Contractor shall comply with all Federal, State, County, and City Laws and Ordinances and Regulations of the Department of Industrial Relations, OSHA, NPDES and Industrial Accident Commission related to the safety and character of the work, equipment and labor personnel.
4. Contractor shall be responsible for coordinating with all Utility agencies.
5. Contractor shall protect in place (by any means necessary) all existing utilities to remain unless otherwise specified herein, contractor shall be responsible for the complete repair at his expense, for any damage to existing utilities, structures, or other site features, as a result of his work.
6. Prior to placing curbs, pavements, base, subbase, track, etc., all underground utilities shall be installed, backfill completed, and the Engineer notified by each of the utility companies having facilities within the work area, that the utility installation has satisfactorily passed acceptance tests.
7. All existing underground utilities, that are not to be re-used shall be abandoned in place. All existing pipelines to be abandoned in place shall be cement slurry filled and capped at least 3'-0" below top of proposed subgrade.
8. Contractor shall verify locations and elevations of existing utilities whether known or unknown prior to beginning construction.
9. Any underground structures such as cesspools, cisterns, mining shafts, tunnels, septic tanks, wells, and pipelines not located prior to construction shall be brought to the attention of the engineer for determiniation of appropriate action such as removal or treatment in a manner judged suitable to the engineer.
10. Contractor shall coordinate location of all proposed utilities with UPRR to assure accuracy of utility connections and compliance with local codes.
11. Any existing conditions found to be a variance with these drawings must be immediately reported to the Engineer.
12. Contractor shall maintain and clean to the satisfaction of the Engineer, all access and service roads used during construction.
13. Contractor shall perform all construction in such a manner as to protect adjacent existing buildings, and other site elements which are to remain in service.
14. Contractor shall provide As-built Drawings for all improvements.
15. No field changes will be permitted without direct written authorization from the UPRR Engineer or his representative.
16. Contractor shall coordinate work which affects adjacent property owners. Any questions or agreements between adjacent property owners and contractor shall be made in writing. A copy of such agreement shall be provided to the UPRR Engineer or his representative.
17. The contractor is responsible for preparing a Stormwater Pollution Prevention Plan (SWPPP) to comply with State regulations. General specifications and typical erosion control details are included in the plan set.
18. Right-of-way lines shown on the plans were taken from existing UPRR right-of-way map and are approximate.
19. Match lines for sheets are based on the existing Main Line stationing unless otherwise specified.
20. Track laying, ballasting, and installation of road crossing panels will be done by UPRR unless otherwise stated.
21. Where existing culverts are to be extended, the contractor shall expose existing drainage structures and field verify size and type before ordering.
22. The contractor is responsible for the removal of all pavement markings that will be in conflict with the proposed work.
23. Contractor shall comply with all Louisiana and Calcasieu Parish standard specifications for construction of public improvements requirements. Calcasieu Parish standard specifications shall prevail.
24. Contractor shall maintain at least one access to all affected business. If necessary, multiphase construction shall be utilized.

DESIGN CRITERIA

1. UPRR standard plans and trackworks
2. Calcasieu Parish Engineering and Public Works Engineering Department
3. Louisiana Department of Transportation Roadway Standards

SURVEY NOTES

1. Railroad stationing for project profiles and alignments is based on stations established for chord definition spiraled curves at the centerline of the existing UPRR Main Line unless otherwise noted.
2. The contractor is responsible for the preservation of all survey control monuments. In the event monuments are damaged or destroyed by the contractor, the Engineer will replace the monument solely at the contractor's expense.

	DATUM
HORIZONTAL	NAD (1983) STATE PLANE COORDINATE SYSTEM, LOUISIANA SOUTH (1702)
VERTICAL	NAVD 88

TRAFFIC NOTES

1. All barricades, warning signs, lights, devices, etc. for the guidance of vehicle traffic and pedestrians must conform to the installation shown in the Manual on Uniform Traffic Control Devices (MUTCD), current edition.
2. Contractor shall make twice daily inspections of barricades and flashing lights to ensure proper placement and functioning of warning devices.
3. Grade crossings closed to traffic during construction shall be barricaded in accordance with the MUTCD.
4. At all grade crossings, all grade crossing warning signs (crossbuck) shall temporarily be relocated during construction and reset after the grade crossings construction is completed to a point adjacent to the roadway and 15 feet from the centerline of the near track as stated in the MUTCD except where automatic grade crossing warning signals/gates exisit. All automatic warning devices are the responsibility of UPRR. At no time shall a crossing be left open without proper warning signs in place.
5. Contractor shall submit traffic control plans to Louisiana Traffic Department for approval at least 2 weeks prior to each road closure. Plans shall be 11" x 17" engineered drawings, sealed by a professional engineer from the State of Louisiana.
6. The contractor is responsible for the prompt replacememt and/or repair of all traffic control devices and appurtenances damaged or disturbed due to construction.

PROJECT CONTACTS

CONTACT	PHONE NUMBER	UPRR
TED HASKELL	281-350-7628	Civil Construction Project Manager
NICK COLEMAN	281-714-9808	Civil Construction Field Manager
RUSS BRITT	501-373-2323	Track Construction Project Manager
DAVID SKIBINSKI	402-544-2421	Project Design Manager
		Project Design Sr. Project Designer
KEVIN RICE	402-544-2213	Structures Design Sr. Manager
		Structures Design Manager
PAUL PINO	402-544-3582	Information Technology - Fiber
STEVE SAND	402-544-8568	Real Estate - Utilities

CONTACT	PHONE NUMBER	FIBER

CONTACT	PHONE NUMBER	UTILITIES

CONTACT	PHONE NUMBER	FEDERAL AND LOCAL GOVERMENT AGENCY

PHONE NUMBER	GENERAL
(800) 336-9193	UPRR CALL BEFORE YOU DIG
(888) 258-0808	CALL BEFORE YOU DIG (NATIONAL DIRECTORY)
(888) 877-7267	UPRR Response Management Communications Center (RMCC)

benesch
engineers · scientists · planners
Alfred Benesch & Company
4633 Washington Road
Kenosha, WI 53144
262-652-6677Job No. 20152.03

UNION PACIFIC

DRAWN BY: HRD
CHECKED BY: MJK
DATE: 09/06/13
SHEET NUMBER G003 of 006

UNION PACIFIC RAILROAD
Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
GENERAL NOTES AND PROJECT CONTACTS

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9/6/2013

ABBREVIATIONS

MISCELLANEOUS

Ac.	Acres
Ave.	Avenue
Blvd.	Boulevard
Bldg.	Building
BNSF	BNSF Railway
C.Y.	Cubic Yards
Conc.	Concrete
°	Degree (s)
Dia.	Diameter
Dr.	Drive
Dwg.	Drawing
E	East
Elev.	Elevation
Exist.	Existing
'	Foot, Feet or Minute (s)
F.S.	Finished Surface
Horiz.	Horizontal
"	Inch, Inches or Second (s)
Inv.	Invert
Lt.	Left
L	Length
L.F.	Lineal Feet
Max.	Maximum
Min.	Minimum
N	North
NTS	Not to Scale
No.	Number
OH	Overhead
Prop.	Proposed
RR	Railroad
Rwy	Railway
R/W	Right of Way
Rt.	Right
S	South
S.F.	Square Feet
Sta.	Station
Std.	Standard
St.	Street
Twp.	Township
Typ.	Typical
UG	Underground
UPRR	Union Pacific Railroad
V	Velocity
Wt.	Weight
W	West
X-ing	Crossing

SIGNAL

ABS	Automatic Block Signal
ATC	Automatic Train Control
CTC	Centralized Traffic Control
DED	Dragging Equipment Detector
DTC	Direct Traffic Control
ELTO	Electric Lock Turnout
HBD	Hot Box Detector
HTTO	Hand Throw Turnout
HWD	High Wide Dectector
POTO	Power Operated Turnout
TWC	Track Warrant Control
WILD	Wheel Impact Load Dectector

STRUCTURES

Bldg.	Building
Br.	Bridge
CB	Catch Basin
CPT	Concrete Pile Trestle - Ballast Deck
CIP	Cast Iron Pipe
CMP	Corrugated Metal Pipe
CMPA	Corrugated Metal Pipe Arch
CSP	Corrugated Steel Pipe
Culv.	Culvert
DI	Drop Inlet
DPGBD	Deck Plate Girder - Ballast Deck
DPGOD	Deck Plate Girder - Open Deck
EBW	East Backwall
F.L.	Flowline
F.F.	Finished Floor
GIP	Galvanized Iron Pipe
Hdwl	Headwall
NBW	North Backwall
PSCT	Prestressed Concrete Trestle
RCA	Reinforced Concrete Arch
RCB	Reinforced Concrete Box
RCP	Reinforced Concrete Pipe
SBW	South Backwall
SSP	Smooth Steel Pipe
SPTBD	Steel Pile Trestle - Ballast Deck
SPTOD	Steel Pile Trestle - Open Deck
SPP	Structural Plate Pipe
TPGBD	Through Plate Girder - Ballast Deck
TPGOD	Through Plate Girder - Open Deck
TPTBD	Timber Pile Trestle - Ballast Deck
TPTOD	Timber Pile Trestle - Open Deck
TTBD	Through Truss - Ballast Deck
TTOD	Through Truss - Open Deck
TWB	Treated Wood Box
VCP	Vitrified Clay Pipe
Viad.	Viaduct
WBW	West Backwall
WIP	Wrought Iron Pipe

TRACK

ATR	Above Top of Rail
Align.	Alignment
BBR	Below Base of Rail
Cntrs.	Centers
CWR	Continuous Welded Rail
DSPD	Double Switch Point Derail
EOT	End of Track
HH	Head Hardened
Jtd.	Jointed Rail
LH	Left Hand
ML	Main Line
MM	Mile Marker
MP	Mile Post
NSC	Not Sufficient Clearance
OTM	Other Track Material
PCC	Point of Compound Curve
PC	Point of Curve
PCS	Point of Curve to Spiral
POC	Point on Curve
PF	1/2" Point of Frog
PI	Point of Intersection
PITO	Point of Intersection of Turnout
PS	Point of Spiral
PSC	Point of Spiral to Curve
POS	Point on Spiral
PT	Point of Tangent
POT	Point on Tangent
Pt. Sw.	Point of Switch
PVC	Point of Vertical Curve
PVI	Point of Vertical Intersection
PVT	Point of Vertical Tangent
RH	Right Hand
SH	Second Hand
SSPD	Single Switch Point Derail
TC	Track Centers
T.F.	Track Feet
Trk.	Track
UXO	Universal Cross-Over
X-Over	Cross-Over

Section Number
Section Sheet No.
Section Description
Scale
Section Number
Section From Sheet No.

UTILITIES

- AIR — Compressed Air
- F/O — Fiber Optic Cable
- G — Gas Pipeline
- OHP — Overhead Power Line
- SS — Sanitary Sewer
- Overhead Signal Line
- UGS — Underground Signal Line
- Steam Line
- S — Storm Sewer
- T — Telephone
- UGE — Underground Electric
- W — Water Main
- Underground Wire
- UD — Under Drain
- V. — Valve
- M.H. — Manhole
- C.B. — Catch Basin
- F.H. — Fire Hydrant
- Junction Box
- Electric Meter
- Gas Meter
- Water Meter
- M.W. — Monitoring Well
- PUMP — Pump

TRACK

- Existing Mainline
- Existing Siding or Spur
- Proposed
- Remove
- Shift
- Relay
- Future
- Foreign Railroad or Industry
- In Buildings or Under Structures
- Turnout
- Wheel Stop
- Bumping Post
- Earthen Bumper
- 56' — Inert Retarder
- 52' — Dowty Retarder
- Derail
- Switch Point Derail or Double Switch Point Derail

PROPERTY

- Section Line
- Center Section Line
- Parcel or Easement Line
- Right of Way
- Former Right of Way
- Right of Way to be Acquired
- Foreign Right of Way

SYMBOLS

ROAD CROSSING WARNING DEVICES

- Crossbuck Sign
- Flashing Light Warning Device
- Flashing Light Warning Device with Gate
- Cantilever Flashing Light Warning Device
- Cantilever Flashing Light Signal with Gate

SIGNAL

- Absolute Signal
- Signal Bridge
- Cantilever Signal
- ACS or CTC Signal
- Dwarf Signal
- Begin CTC
- Microwave Tower
- AEI — AEI
- BB — Battery Box
- Dragging Equipment Detector
- GEN. — Generator
- Hot Box Detector

STRUCTURES

- Culvert
- Culvert with Headwalls
- Double Culvert
- Railroad Bridge
- Highway Overpass
- Highway Underpass
- Tunnel
- Building
- FP — Flag Pole

LIGHTING

- Light Pole
- Light Tower

SIGNS

- Stop
- Yard Limit
- 1 Mile to Yard Limit
- W — Whistle Post
- Flanger
- Station
- Reduce Speed
- Resume Speed
- General Purpose

FENCES

- Barbed Wire
- Chain Link
- Snow / Sand
- Cattle Guard

ROADS

- Paved Road
- Unimproved Road
- 80 — Interstate Highway
- 20 — Federal Highway
- 58 — State Highway
- C3 — County Highway

OTHER

- Wetlands
- River or Lake
- Embankment
- Flow Line
- Milepost
- MM — Milemarker
- 15 — Control Point
- 1 — Revision Number
- Revision Cloud

CONSTRUCTION

- Note — Note (Work by Contractor)
- Note — Note (Work by Others)
- Cut Lines
- Fill Lines

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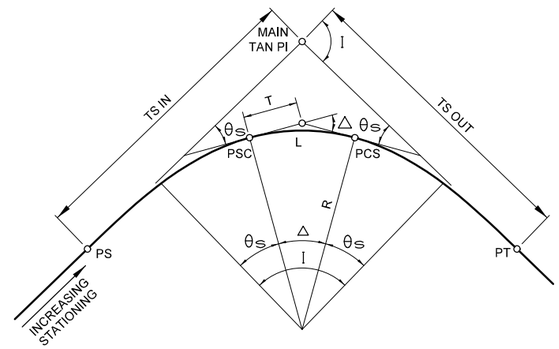

FIGURE A
CIRCULAR CURVES WITH SPIRAL TRANSITION

I - TOTAL INTERSECTION ANGLE

θ_S - SPIRAL ANGLE = $\frac{A L^2}{2}$

Δ - CENTRAL ANGLE OF CIRCULAR CURVE = $I - 2\theta_S$

Dc - DEGREE OF CURVE

A - RATE OF CHANGE OF DEGREE OF CURVE PER 100-ft. OF LENGTH = $\frac{Dc}{L}$

R - RADIUS OF CIRCULAR CURVE

T - TANGENT LENGTH OF CIRCULAR CURVE = $R \tan\frac{\Delta}{2}$

L - LENGTH OF CIRCULAR CURVE = $\frac{\Delta}{Dc} \times 100$

PS - TANGENT TO SPIRAL

PSC - SPIRAL TO CURVE

PCS - CURVE TO SPIRAL

PT - SPIRAL TO TANGENT

MAIN TAN PI - POINT OF INTERSECTION OF MAIN TANGENTS

(TS IN)
(TS OUT) - TANGENT LENGTH OF COMPLETE CURVE = $(R+o) \tan\frac{I}{2} + t$

(WHEN SPIRALS OF EQUAL LENGTH ARE USED ON BOTH SIDES OF CIRCULAR CURVE, SEE FIGURE C. FOR o AND t).

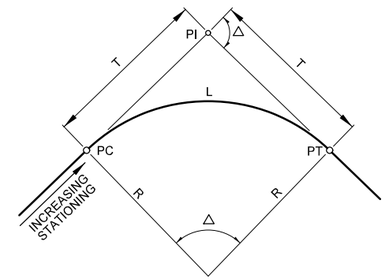

FIGURE B
SIMPLE CIRCULAR CURVE

R = RADIUS OF CIRCULAR CURVE

Δ = CENTRAL ANGLE OF CIRCULAR CURVE

$T = R \tan\frac{\Delta}{2}$

$L = \frac{\Delta}{Dc} \times 100$

$Dc = 2 \sin^{-1} (50/R)$ = DEGREE OF CURVE (CHORD DEFINITION)

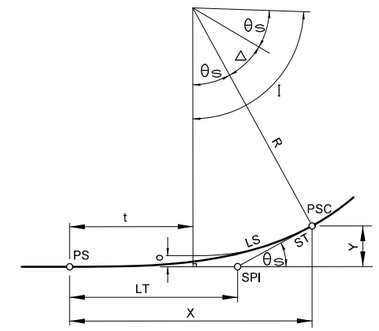

FIGURE C
SPIRAL TRANSITION CURVE

SPIRAL TRANSITION CURVE DATA:
THE SPIRAL USED IS DEFINED BY THE TALBOT SPIRAL.

LS = LENGTH OF SPIRAL (TS TO PSC)

$\theta_S = \frac{A L^2}{2}$

$X = 100 L_1 - 0.000762 A^2 L_1^5$

$Y = 0.291 A L_1^3 - 0.00000158 A^3 L_1^7$

$o = 0.0727 A L_1^3$

$t = 50 L_1 - 0.000127 A^2 L_1^5$

$ST = \frac{Y}{\sin \theta_S}$

$LT = X - \frac{Y}{\tan \theta_S}$

$Dc = 2 \sin^{-1} (50/R)$ = DEGREE OF CURVE (CHORD DEFINITION)

L_1 - TOTAL NO. OF STATIONS IN SPIRAL

SPI - SPIRAL POINT OF INTERSECTION

NOTE: Dc, θ_S, Δ, AND I ARE IN DEGREES.
ALL OTHERS DIMENSIONS ARE FEET.

CONTROL POINTS

CONTROL POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPION
CP-50	637,290.12	2,665,117.59	14.42	5/8" REBAR
CP-51	637,256.09	2,665,293.97	14.50	5/8" REBAR
CP-52	637,247.70	2,665,690.74	12.75	5/8" REBAR
CP-53	637,246.57	2,666,140.29	13.14	5/8" REBAR
CP-54	637,272.60	2,666,737.44	12.97	5/8" REBAR
CP-55	637,284.38	2,667,075.05	12.66	5/8" REBAR
CP-56	637,237.56	2,667,781.86	11.80	5/8" REBAR
CP-57	637,255.97	2,668,655.11	11.31	5/8" REBAR
CP-58	537,217.36	2,669,391.43	12.13	5/8" REBAR
CP-59	637,209.67	2,670,101.44	11.42	5/8" REBAR
CP-60	637,202.11	2,671,010.81	11.59	5/8" REBAR
CP-61	637,221.70	2,671,720.06	12.14	5/8" REBAR
CP-62	637,215.28	2,672,246.37	11.91	5/8" REBAR
CP-63	637,161.02	2,673,242.53	12.47	5/8" REBAR
B1	637,109.32	2,666,677.26	6.51	5/8" REBAR
B2	637,082.34	2,666,373.17	11.24	MAG NAIL

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PROPOSED CURVE DATA

CURVE NO.	DESCRIPTION	DELTA/ SPRIAL ANGLE	DEGREE	TANGENT	RADIUS	LENGTH	DESIGN SPEED	SUPER ELEVATION	PC/TS/SC	PI	PT/CS/ST	TRACK
C-1	CURVE	38°46'47"	17°30'00"	115.68'	328.68'	221.60'	30 MPH	TBD	STA 792+68.87 N 637,171.96 E 2,665,238.38	STA 793+84.55 N 637,249.33 E 2,665,324.37	STA 794+90.46 N 637,225.80 E 2,665.439.87	SIDING
C-1	SPIRAL OUT	3°50'06"		LONG 29.34' SHORT 14.67'		44.00'				STA 795+05.14 N 637,256.62 E 2,665,454.52	STA 795+34.46 N 637,256.29 E 2,665,483.86	SIDING
C-2	CURVE	3°48'35"	3°00'00"	63.53'	1910.08'	127.01'	30 MPH	3/4"	STA 865+10.62 N 637,179.33 E 2,672,459.59	STA 865+74.14 N 637,178.63 E 2,672,523.11	STA 866+37.61 N 637,182.15 E 2,672,586.54	SIDING

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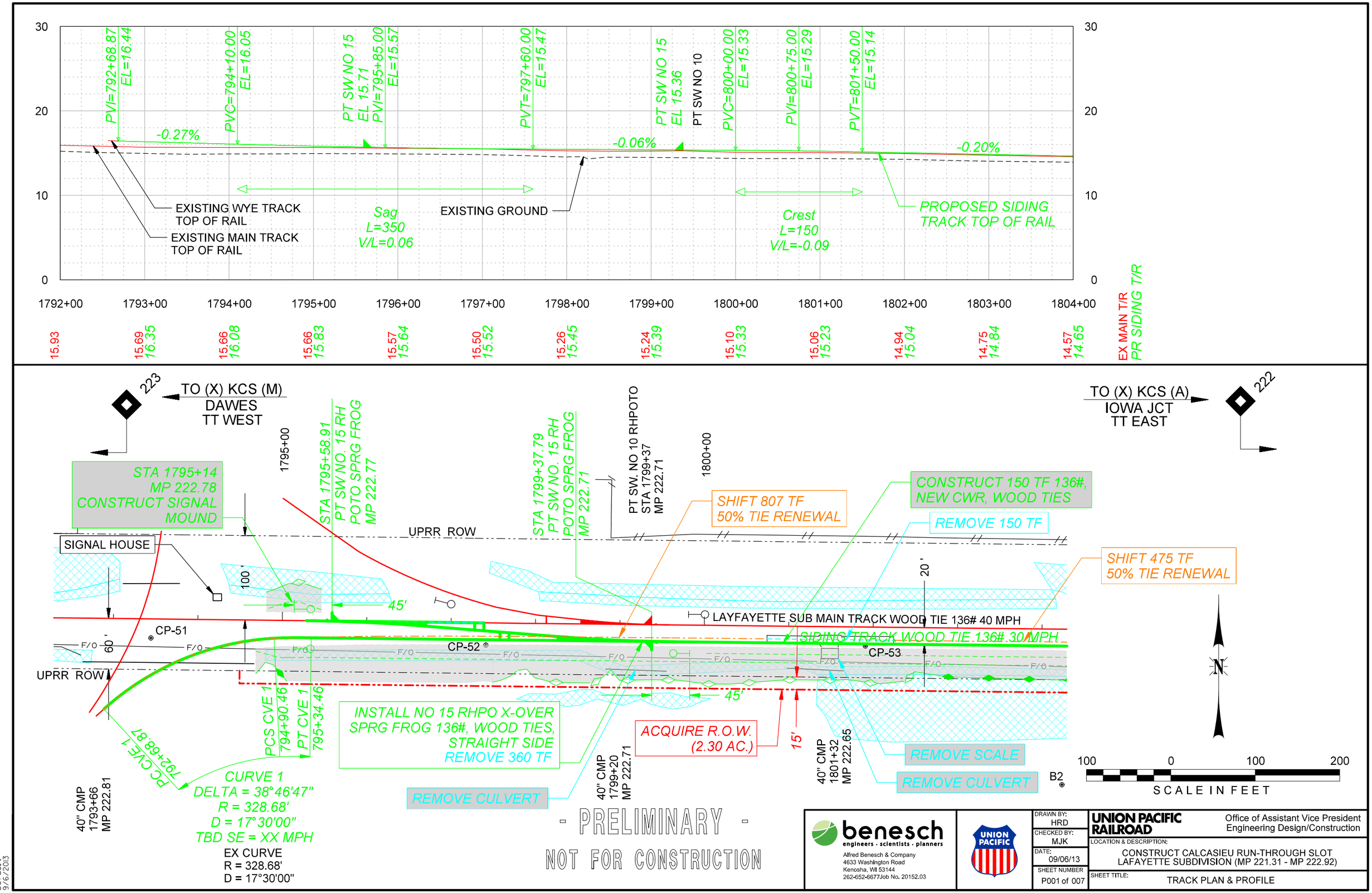
CURVE DATA


PVI=792+68.87
EL=16.44
PVC=794+10.00
EL=16.05
PT SW NO 15
EL 15.71
PVI=795+85.00
EL=15.57
PVT=797+60.00
EL=15.47
PT SW NO 15
EL 15.36
PT SW NO 10
PVC=800+00.00
EL=15.33
PVI=800+75.00
EL=15.29
PVT=801+50.00
EL=15.14
-0.27%
-0.06%
-0.20%
EXISTING WYE TRACK
TOP OF RAIL
EXISTING MAIN TRACK
TOP OF RAIL
Sag
L=350
V/L=0.06
EXISTING GROUND
Crest
L=150
V/L=-0.09
PROPOSED SIDING
TRACK TOP OF RAIL
1792+00
1793+00
1794+00
1795+00
1796+00
1797+00
1798+00
1799+00
1800+00
1801+00
1802+00
1803+00
1804+00
15.93
15.69
16.35
15.66
16.08
15.66
15.83
15.57
15.64
15.50
15.52
15.26
15.45
15.24
15.39
15.10
15.33
15.06
15.23
14.94
15.04
14.75
14.84
14.57
14.65
EX MAIN T/R
PR SIDING T/R
223
TO (X) KCS (M)
DAWES
TT WEST
TO (X) KCS (A)
IOWA JCT
TT EAST
222
1795+00
STA 1795+58.91
PT SW NO. 15 RH
POTO SPRG FROG
MP 222.77
STA 1799+37.79
PT SW NO. 15 RH
POTO SPRG FROG
MP 222.71
PT SW. NO 10 RHPOTO
STA 1799+37
MP 222.71
1800+00
STA 1795+14
MP 222.78
CONSTRUCT SIGNAL
MOUND
SHIFT 807 TF
50% TIE RENEWAL
CONSTRUCT 150 TF 136#,
NEW CWR, WOOD TIES
REMOVE 150 TF
SHIFT 475 TF
50% TIE RENEWAL
SIGNAL HOUSE
UPRR ROW
100'
45'
20'
LAYFAYETTE SUB MAIN TRACK WOOD TIE 136# 40 MPH
SIDING TRACK WOOD TIE 136# 30 MPH
CP-51
CP-52
CP-53
60'
F/O
UPRR ROW
PCS CVE 1
794+90.46
PT CVE 1
795+34.46
PC CVE 1
792+68.87
INSTALL NO 15 RHPO X-OVER
SPRG FROG 136#, WOOD TIES,
STRAIGHT SIDE
REMOVE 360 TF
ACQUIRE R.O.W.
(2.30 AC.)
15'
REMOVE SCALE
REMOVE CULVERT
REMOVE CULVERT
40" CMP
1793+66
MP 222.81
CURVE 1
DELTA = 38°46'47"
R = 328.68'
D = 17°30'00"
TBD SE = XX MPH
EX CURVE
R = 328.68'
D = 17°30'00"
40" CMP
1799+20
MP 222.71
40" CMP
1801+32
MP 222.65
B2
N
100
0
100
200
SCALE IN FEET
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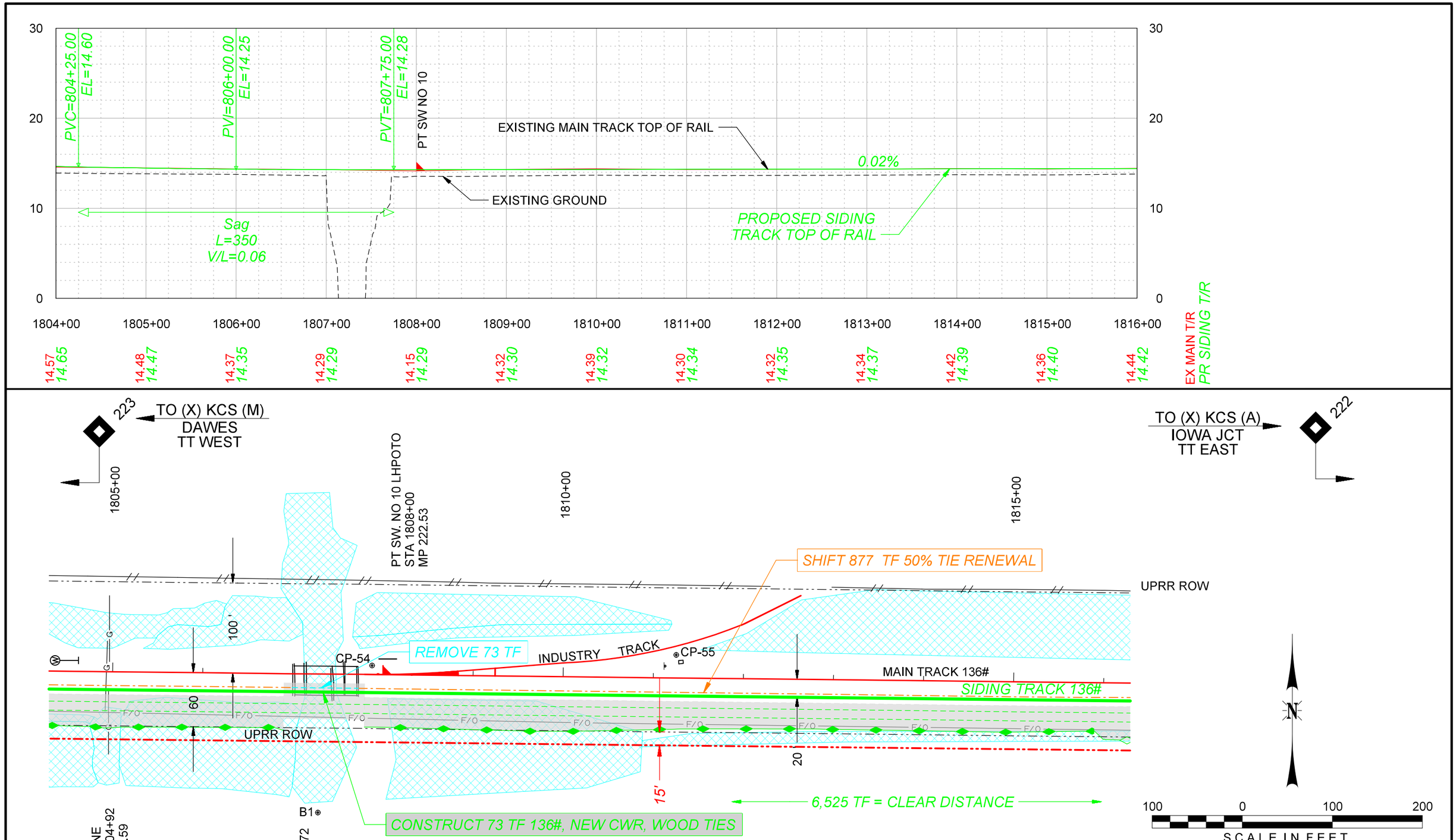

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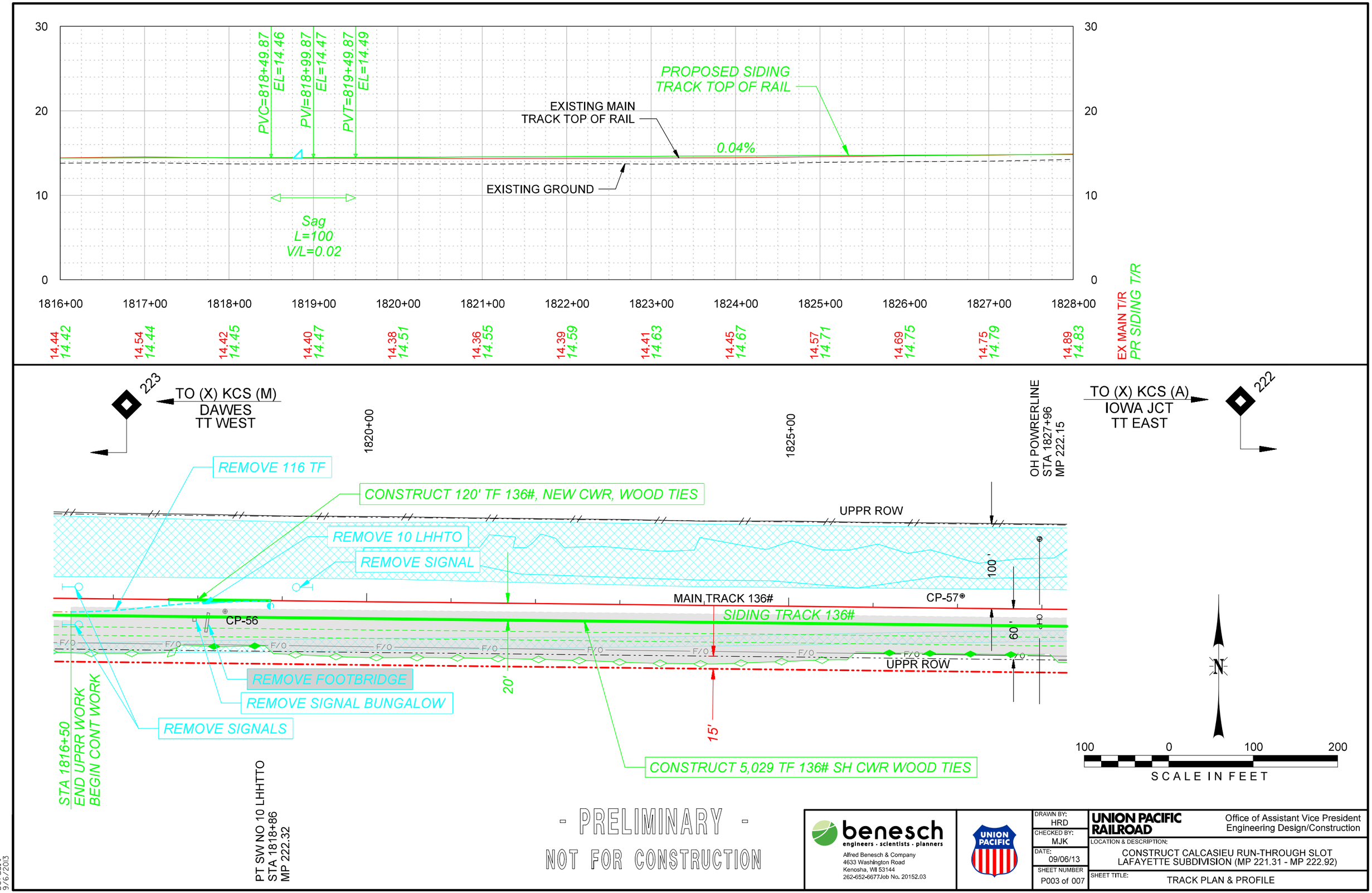
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20
10
0
PVC=818+49.87
EL=14.46
PVI=818+99.87
EL=14.47
PVT=819+49.87
EL=14.49
PROPOSED SIDING
TRACK TOP OF RAIL
EXISTING MAIN
TRACK TOP OF RAIL
0.04%
EXISTING GROUND
Sag
L=100
V/L=0.02
1816+00
1817+00
1818+00
1819+00
1820+00
1821+00
1822+00
1823+00
1824+00
1825+00
1826+00
1827+00
1828+00
14.44 14.42
14.54 14.44
14.42 14.45
14.40 14.47
14.38 14.51
14.36 14.55
14.39 14.59
14.41 14.63
14.45 14.67
14.57 14.71
14.69 14.75
14.75 14.79
14.89 14.83
EX MAIN T/R
PR SIDING T/R
223
TO (X) KCS (M)
DAWES
TT WEST
1820+00
1825+00
OH POWRERLINE
STA 1827+96
MP 222.15
TO (X) KCS (A)
IOWA JCT
TT EAST
222
REMOVE 116 TF
CONSTRUCT 120' TF 136#, NEW CWR, WOOD TIES
UPPR ROW
REMOVE 10 LHHTO
REMOVE SIGNAL
100'
MAIN TRACK 136#
CP-57
SIDING TRACK 136#
CP-56
60'
F/O
UPPR ROW
REMOVE FOOTBRIDGE
REMOVE SIGNAL BUNGALOW
REMOVE SIGNALS
20'
15'
STA 1816+50
END UPRR WORK
BEGIN CONT WORK
PT SW NO 10 LHHTTO
STA 1818+86
MP 222.32
CONSTRUCT 5,029 TF 136# SH CWR WOOD TIES
N
100 0 100 200
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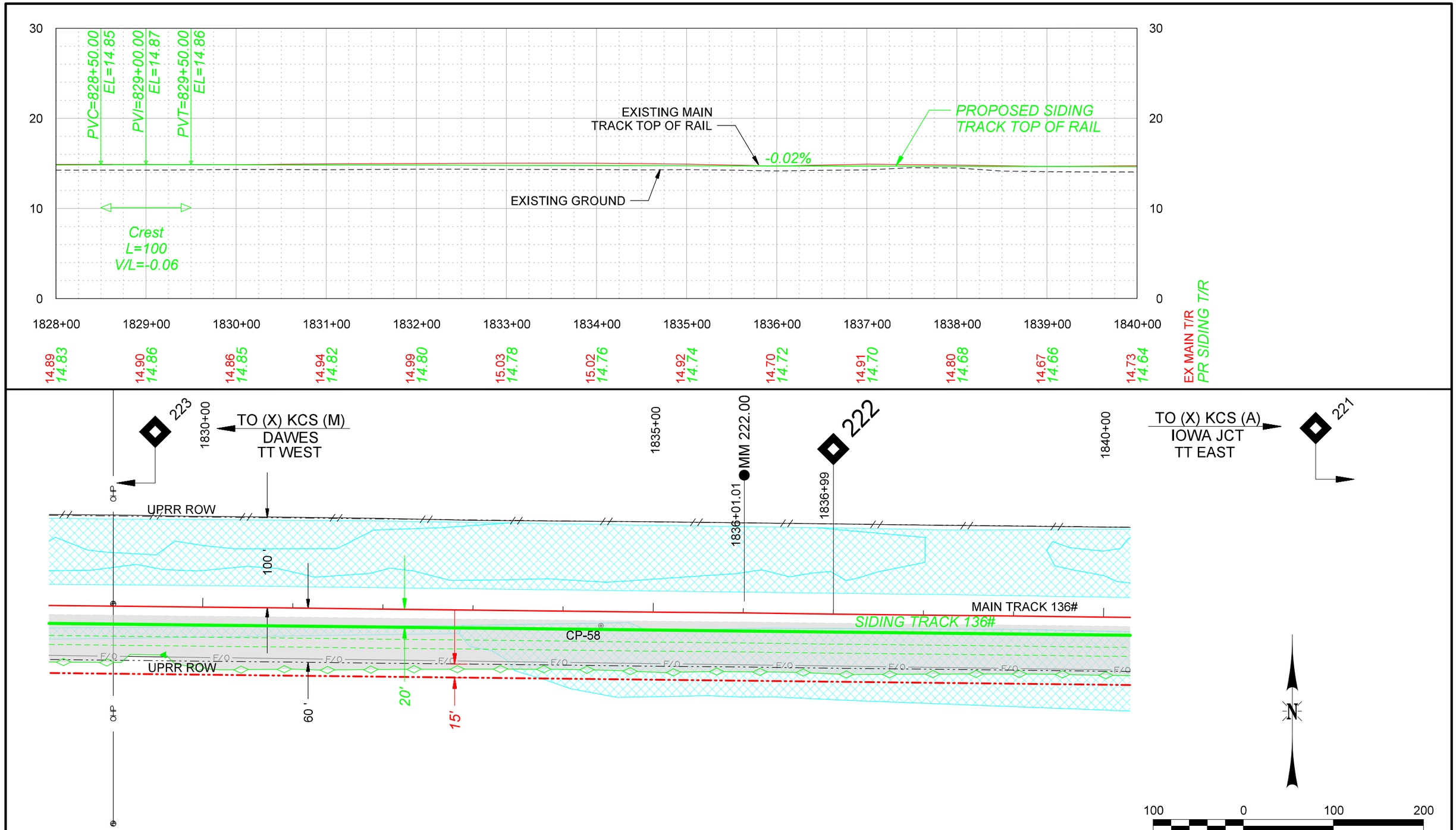

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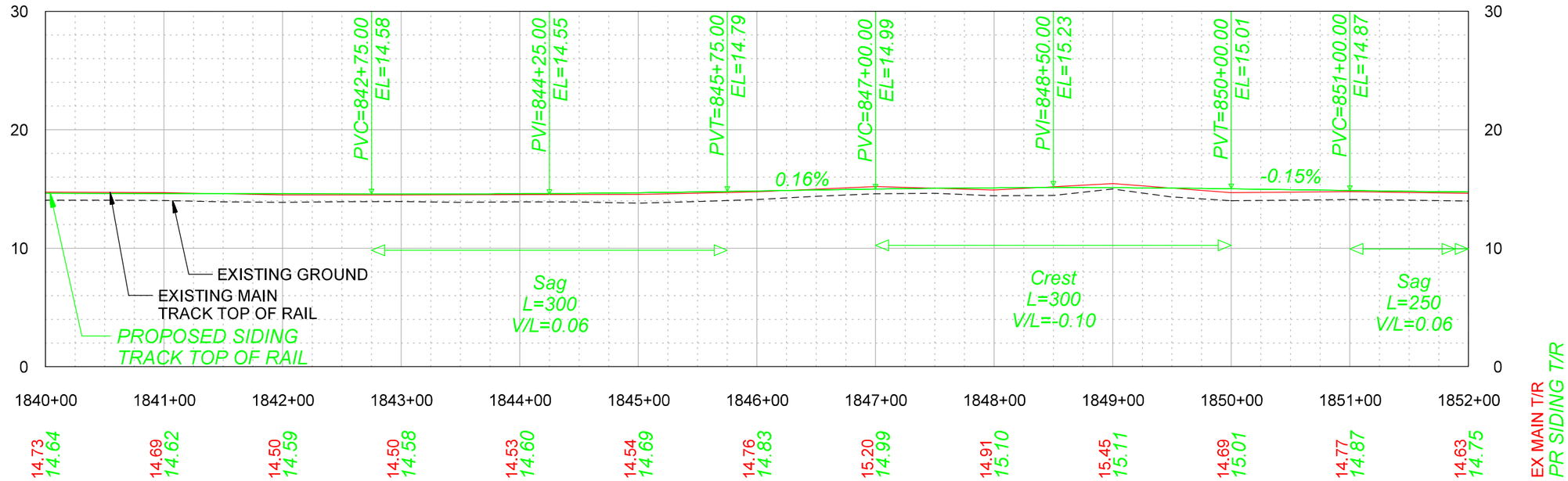

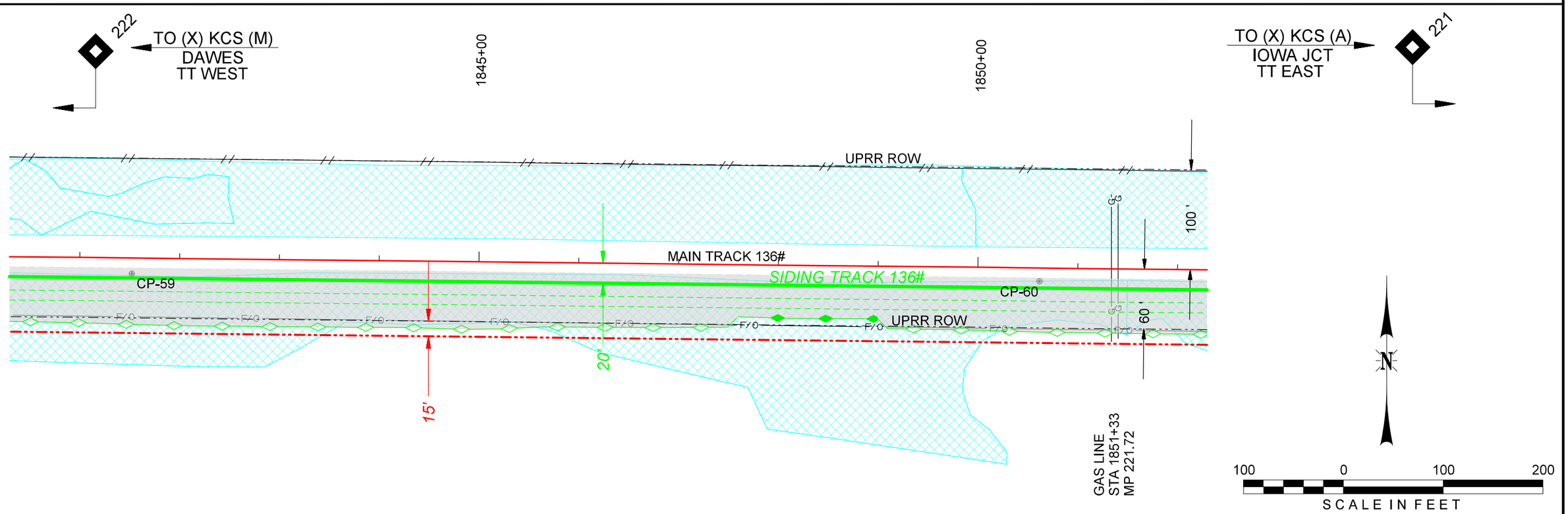

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CONSTRUCT CALCASIEU RUN-THROUGH SLOT
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SHEET TITLE:
TRACK PLAN & PROFILE

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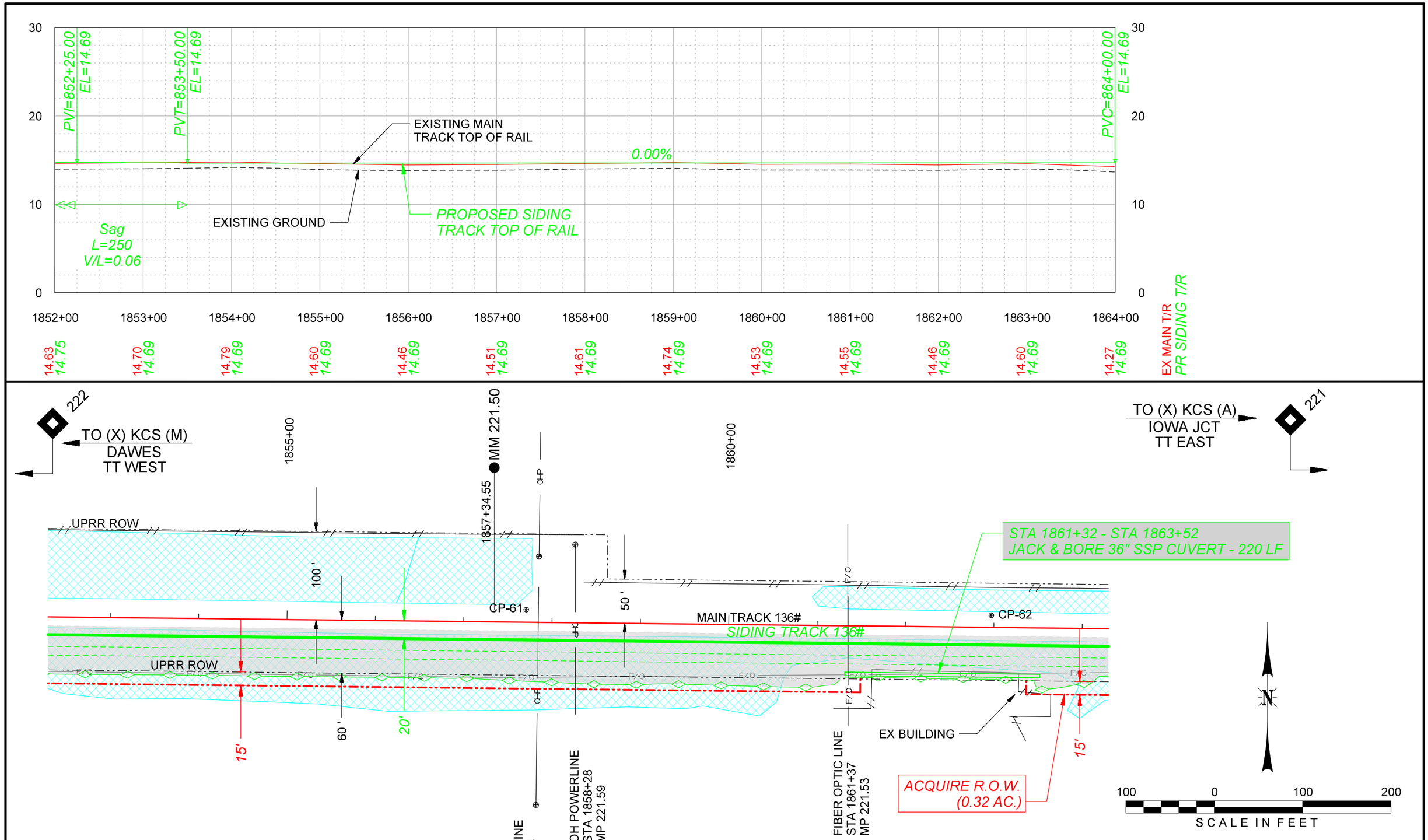

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SHEET TITLE:
TRACK PLAN & PROFILE

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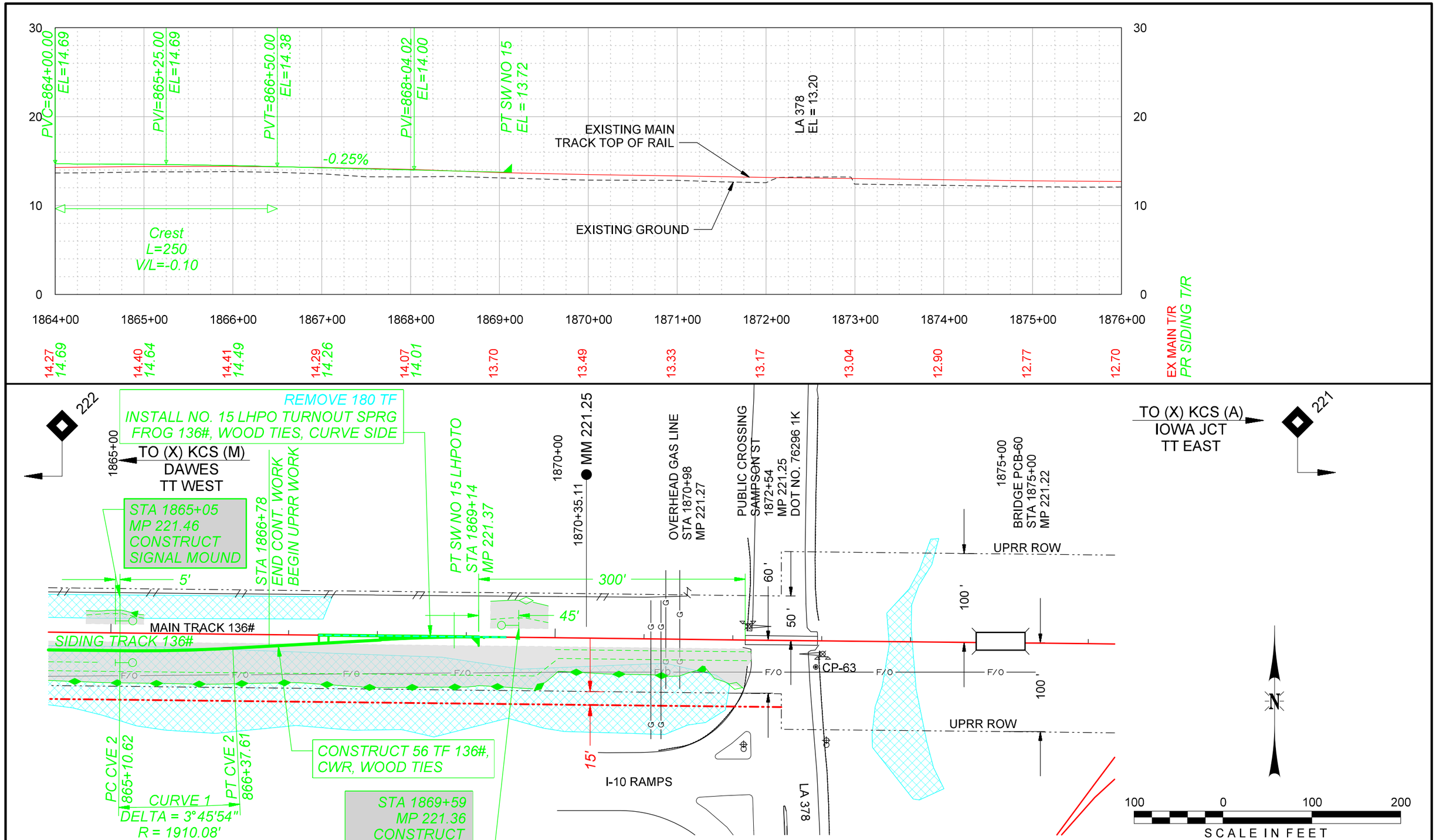

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SHEET TITLE:
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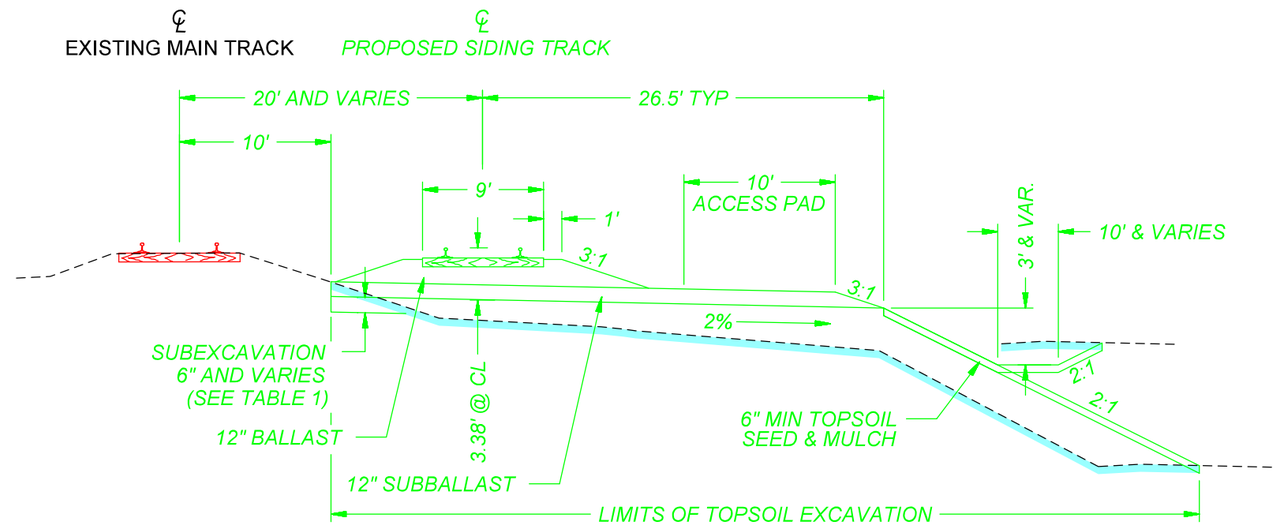
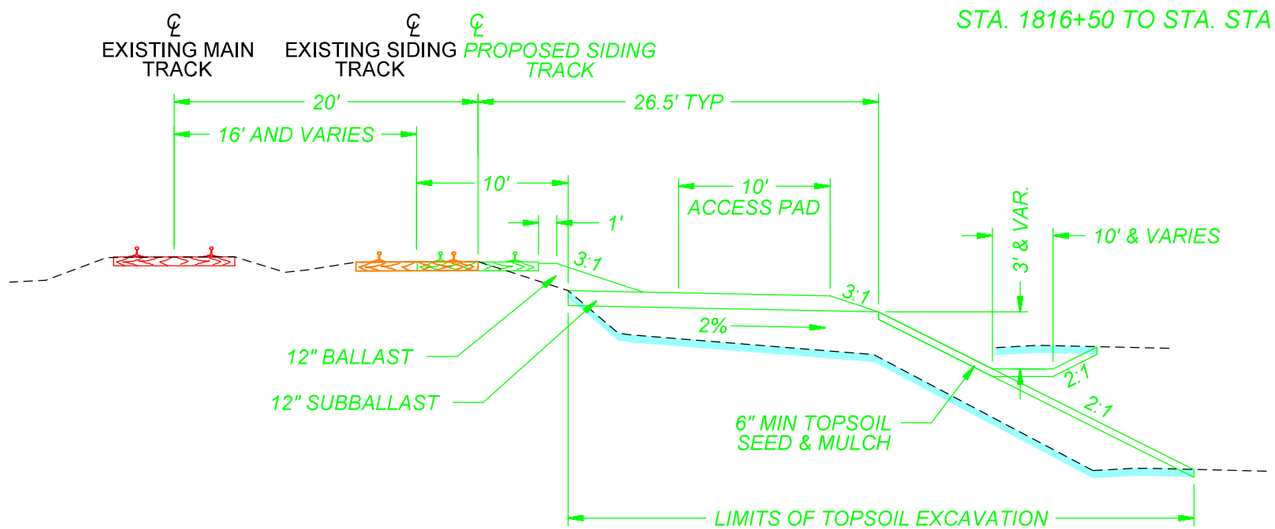


CONSTRUCT SIDING TRACK

STA. 1816+50 TO STA. STA 1869+14



SHIFTING SIDING TRACK

STA. 1794+69 TO STA. STA 1816+50

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CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
TYPICAL SECTIONS

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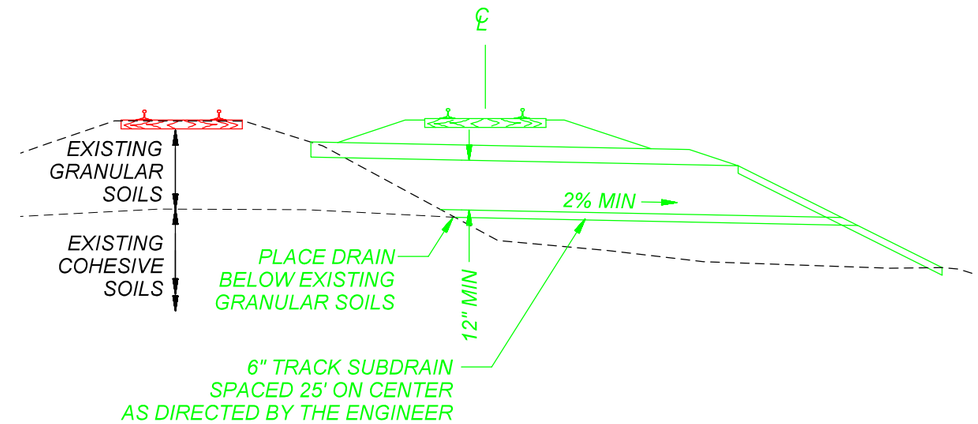
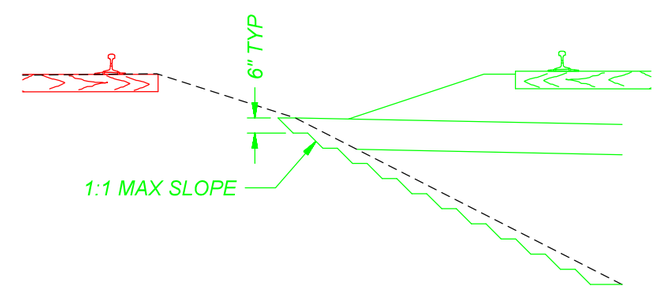


TRANSVERSE DRAINS

TABLE 1

BORING	STATION	OFFSET	NOTE

BORING	STATION	OFFSET	NOTE



BENCHING DETAIL

NOTE: SEE GEOTECHNICAL ENGINEERING REPORT FOR MORE INFORMATION

a GRANULAR MATERIAL IN EMBANKMENT MIGHT REQUIRE INSTALLATION OF TRANSVERSE DRAINS THRU NEW EMBANKMENT CONSTRUCTED OF COHESIVE FILL MATERIALS.

b CULVERT EXTENSION OR NEW LOCATION. SEE RECOMMENDATION 4.

c DEPTH OF EXCAVATION SHOULD EXTEND 0.5 FEET BELOW PROPOSED FINISHED TRACK SUBGRADE ELEVATION.

d EXCAVATE TO 1.0 FT. BELOW FINISHED SUBGRADE, REWORK RESULTANT UPPER 6 INCHES & REPLACE W/ APPROVED FILL MATERIAL.

e LOCATION THAT MIGHT REQUIRE SUBGRADE STABILIZATION OR DEWATERING DURING AND FOLLOWING RAINY SEASONS. SEE RECOMMENDATION 5.

f OVER-EXCAVATE FOR TRACK SUBGRADE ELASTIC UNIFORMITY. SEE RECOMMENDATION 3.

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TYPICAL SECTIONS

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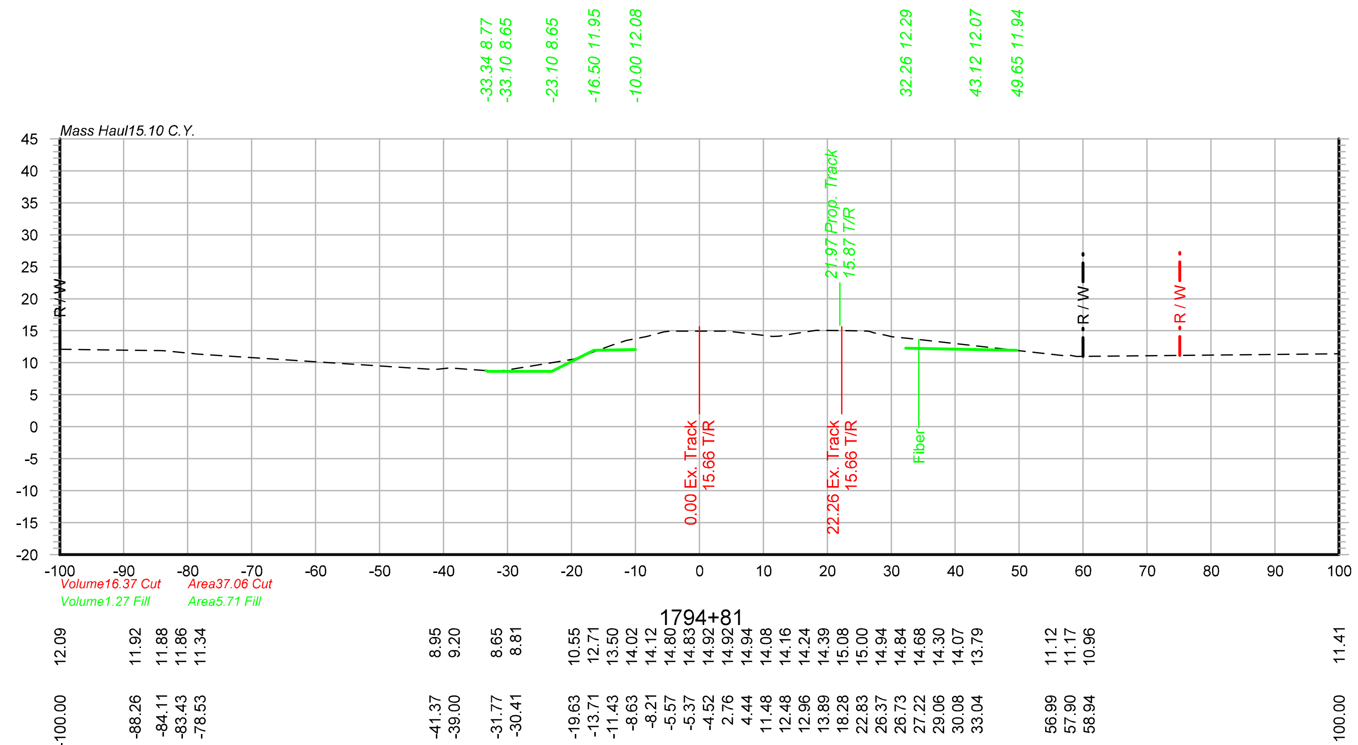

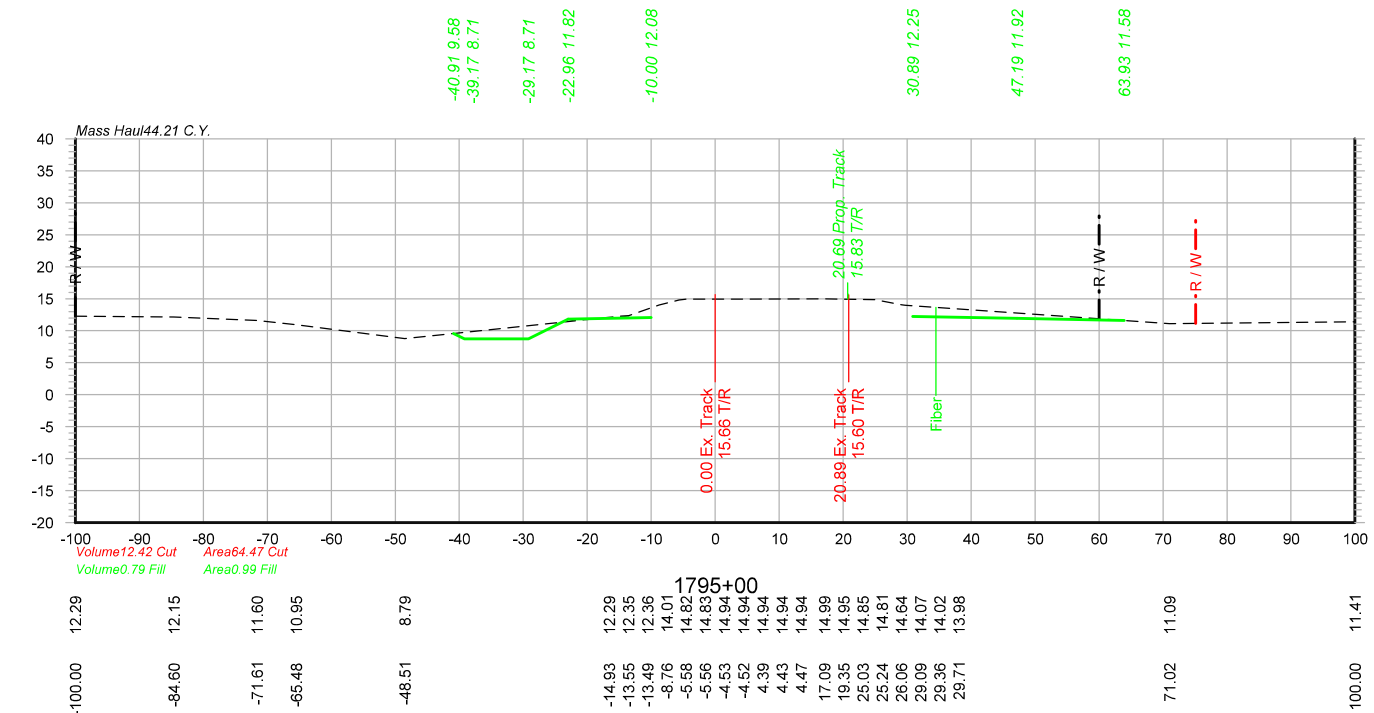

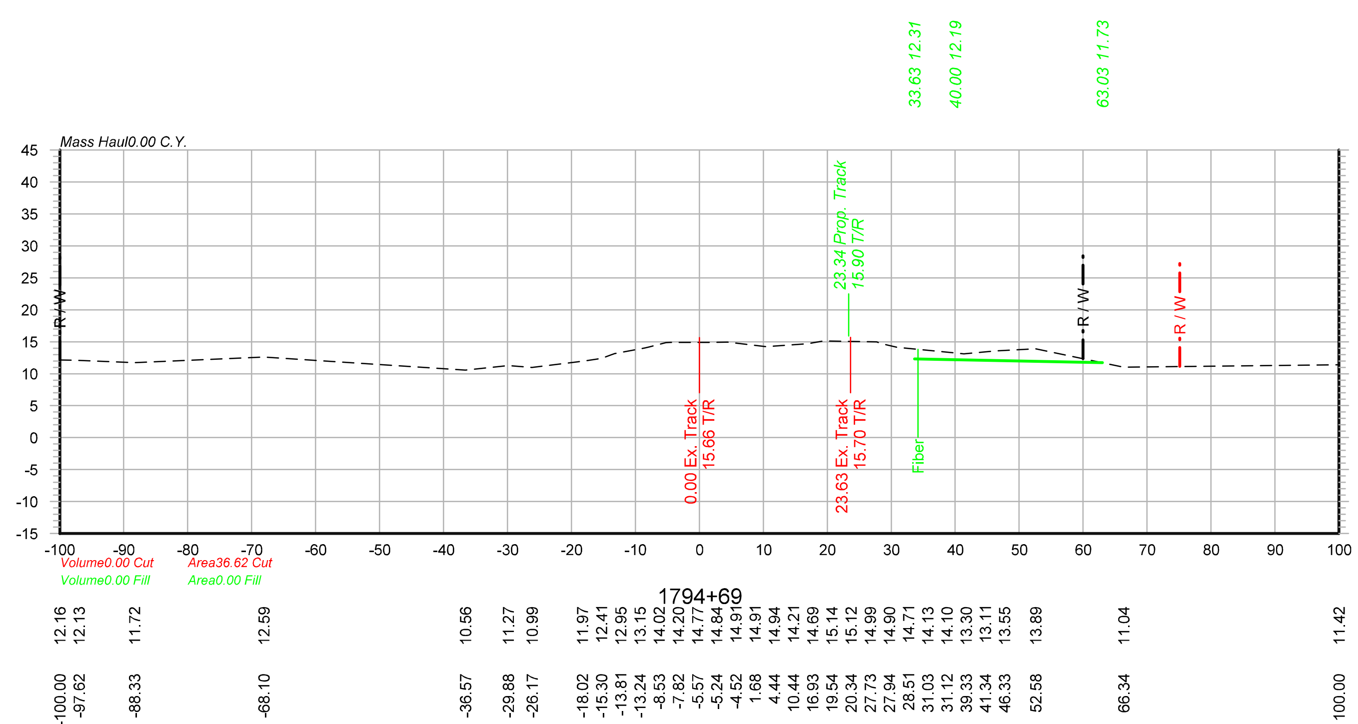

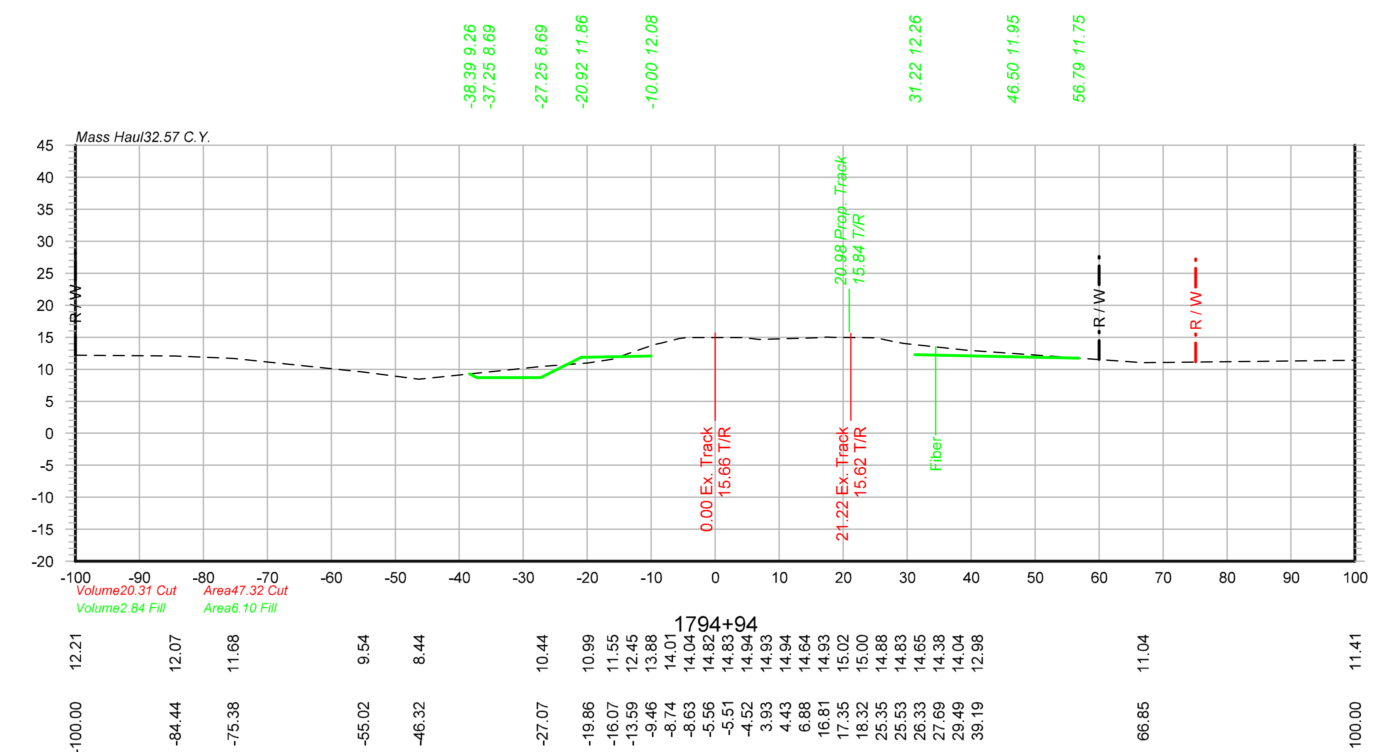

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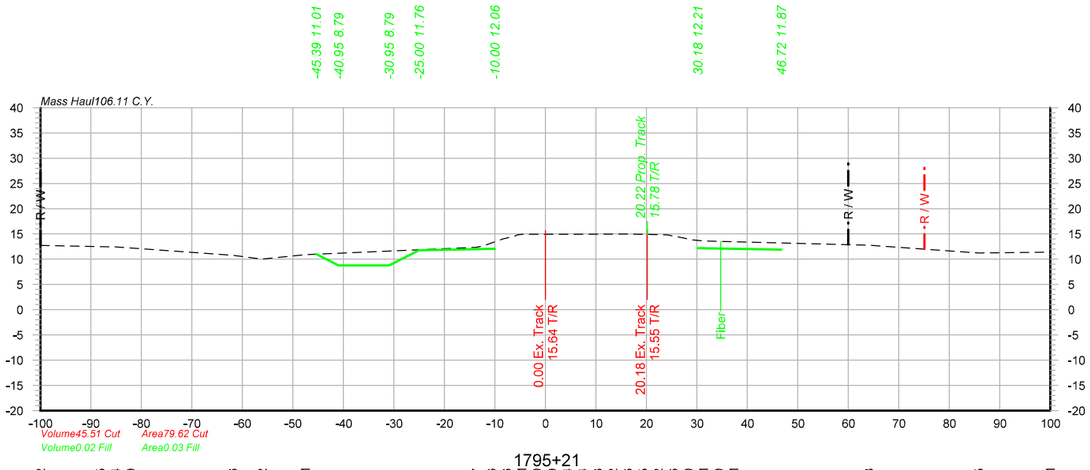
DATE: 09/06/13	
SHEET NUMBER X001 of 027	SHEET TITLE: CROSS SECTIONS STA.1794+69 TO STA.1795+00



1795+21

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12.44	-85.13
12.39	-84.56
10.76	-61.90
10.02	-56.12
10.91	-47.54
12.37	-13.67
12.66	-12.25
13.96	-8.50
14.61	-5.99
14.80	-5.59
14.89	-4.77
14.94	-4.53
14.94	2.52
14.93	4.45
14.92	6.32
14.96	16.29
14.85	22.61
14.82	24.25
14.76	24.40
14.60	25.23
14.11	27.84
13.90	28.33
13.61	31.42
12.78	64.04
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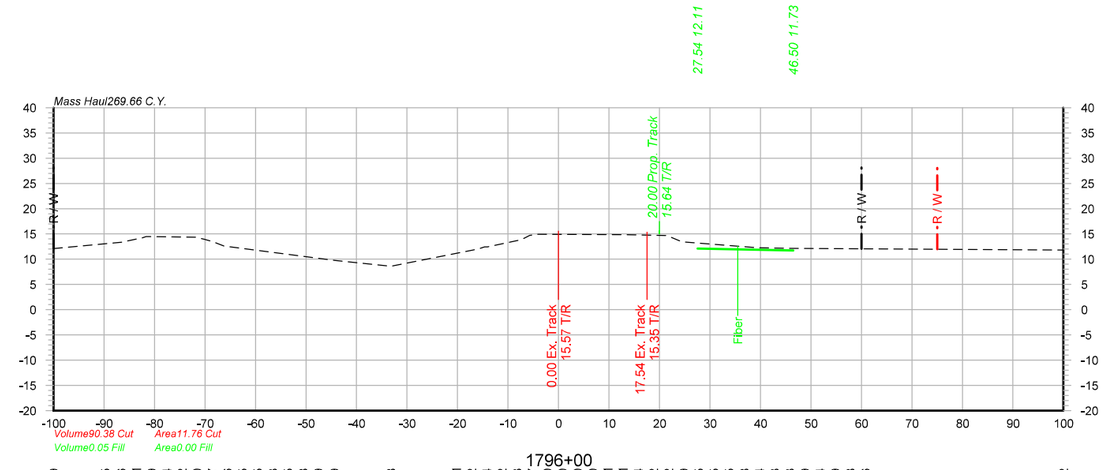
11.41	100.00



1796+00

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13.05	-89.76
13.36	-86.57
14.01	-83.45
14.09	-82.98
14.14	-82.66
14.22	-82.39
14.40	-81.89
14.47	-81.72
14.46	-81.04
14.35	-71.84
14.25	-71.35
13.93	-70.10
13.75	-69.54
13.48	-68.48
12.59	-66.23
9.79	-44.39
8.58	-33.19
12.01	-15.89
12.42	-14.64
12.44	-14.21
12.42	-14.10
12.43	-14.06
13.67	-8.17
13.80	-7.57
13.80	-7.56
13.80	-7.56
14.20	-6.73
14.71	-5.68
14.71	-5.67
14.74	-5.50
14.92	-4.55
14.92	-4.51
14.89	4.51
14.85	13.26
14.85	13.29
14.85	13.30
14.68	21.34
14.44	22.06
14.43	22.08
14.43	22.08
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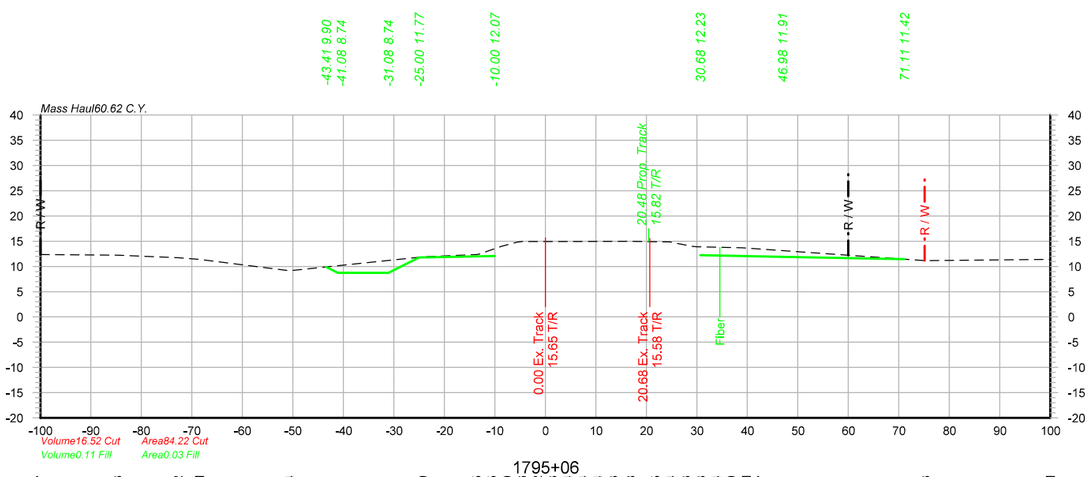
12.16	45.91
11.82	100.00



1795+06

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12.35	-13.59
12.45	-13.14
13.99	-8.68
14.76	-5.70
14.82	-5.57
14.93	-4.60
14.94	-4.52
14.94	3.86
14.94	4.43
14.93	5.00
14.98	16.86
14.85	24.37
14.84	24.81
14.83	24.85
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13.99	29.07
13.91	29.93
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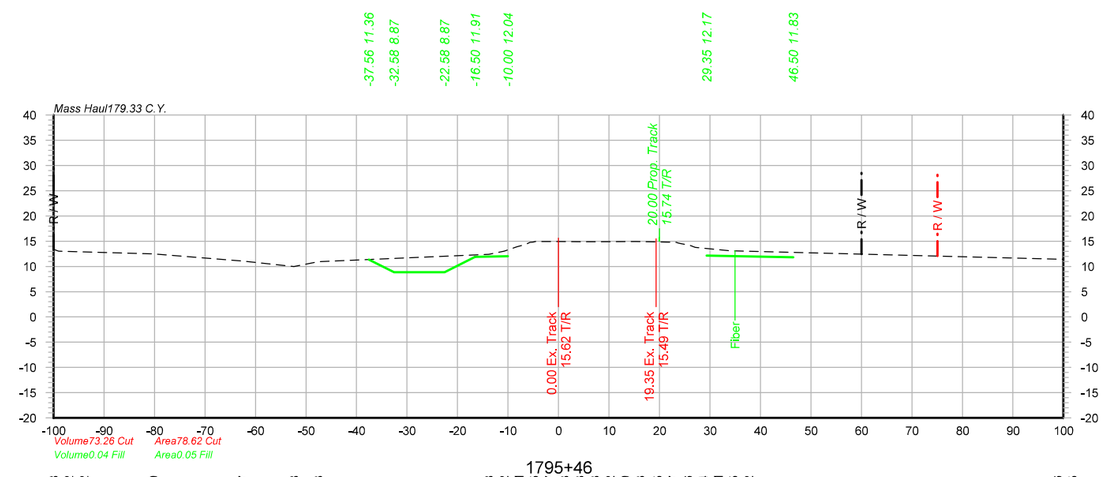
11.41	100.00



1795+46

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9.98	-52.40
10.93	-47.58
12.38	-13.81
13.02	-10.77
13.91	-8.21
14.35	-6.49
14.77	-5.61
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14.93	-4.53
14.93	0.30
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14.90	8.51
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14.85	19.66
14.77	23.33
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14.54	24.23
14.21	26.02
13.75	27.10
13.12	33.90
11.46	98.84
11.45	100.00

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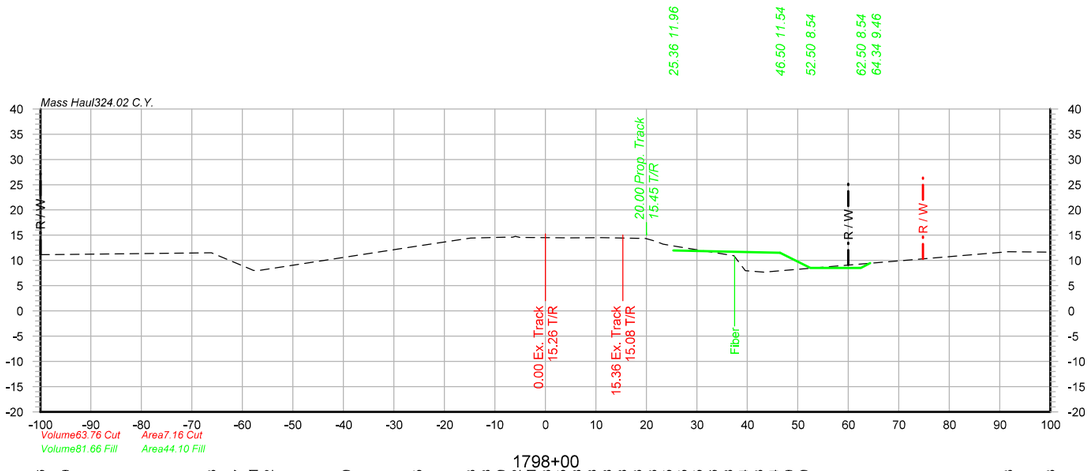

1798+00

-100.00	11.16
-95.04	11.19
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-57.81	8.01
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-39.42	10.70
-25.30	12.85
-14.80	14.43
-7.96	14.58
-7.49	14.60
-6.64	14.62
-6.50	14.61
-6.07	14.73
-5.96	14.75
-5.18	14.58
-5.15	14.58
-5.11	14.58
5.08	14.48
11.08	14.53
11.09	14.53
19.81	14.35
19.83	14.35
19.83	14.35
20.90	14.06
21.93	13.78
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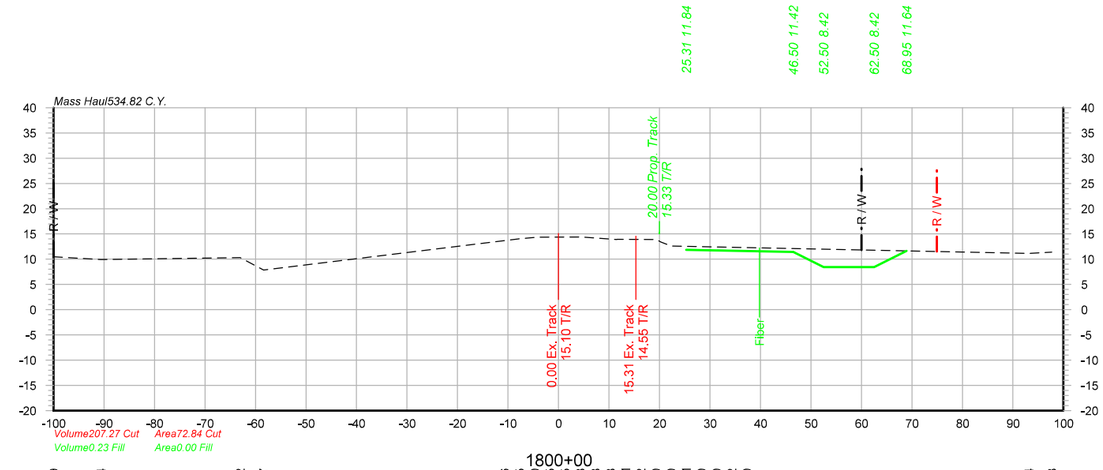

1800+00

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-58.41	7.87
-7.56	14.06
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-4.69	14.30
-4.47	14.35
-4.47	14.35
4.47	14.38
4.51	14.38
4.53	14.38
11.55	13.91
11.57	13.92
19.41	13.90
19.42	13.90
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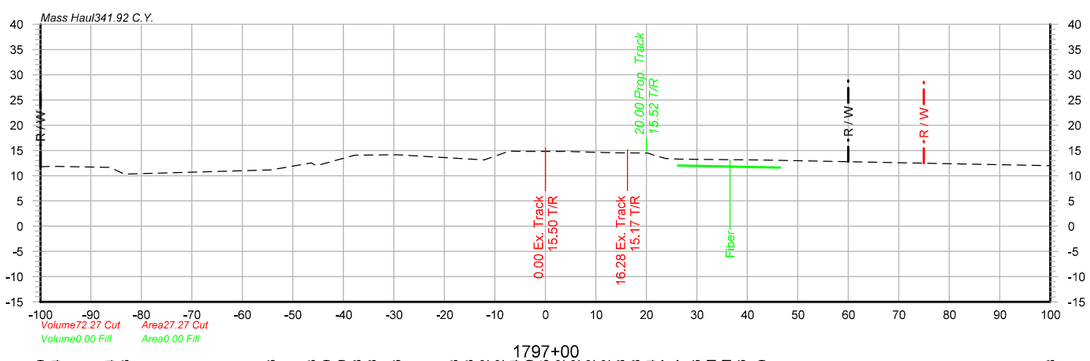

1797+00

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-45.33	11.99
-37.87	14.00
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-29.45	14.16
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-12.23	13.13
-12.15	13.12
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12.28	14.58
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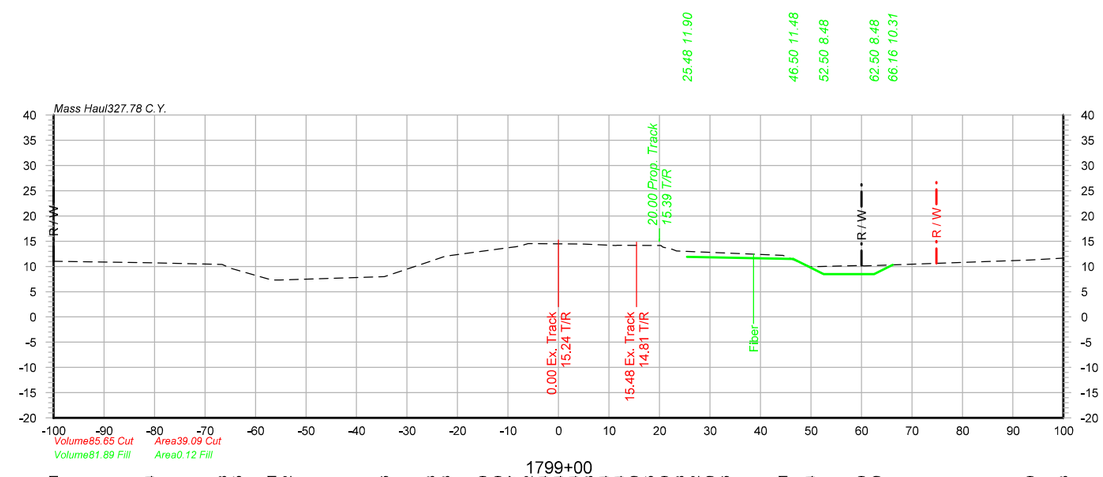

1799+00

-100.00	11.01
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-34.49	7.96
-25.35	11.03
-22.42	12.03
-10.11	13.69
-8.43	13.89
-7.56	14.07
-6.01	14.52
-5.98	14.54
-5.98	14.54
-5.91	14.54
4.81	14.43
11.33	14.14
11.40	14.14
11.59	14.20
20.27	14.15
20.37	14.09
20.38	14.08
20.70	13.82
22.53	13.40
23.38	13.06
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59.99	10.19
60.47	10.10
93.39	11.29
100.00	11.63

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DATE: 09/06/13	
SHEET NUMBER X003 of 027	SHEET TITLE: CROSS SECTIONS STA.1797+00 TO STA.1800+00

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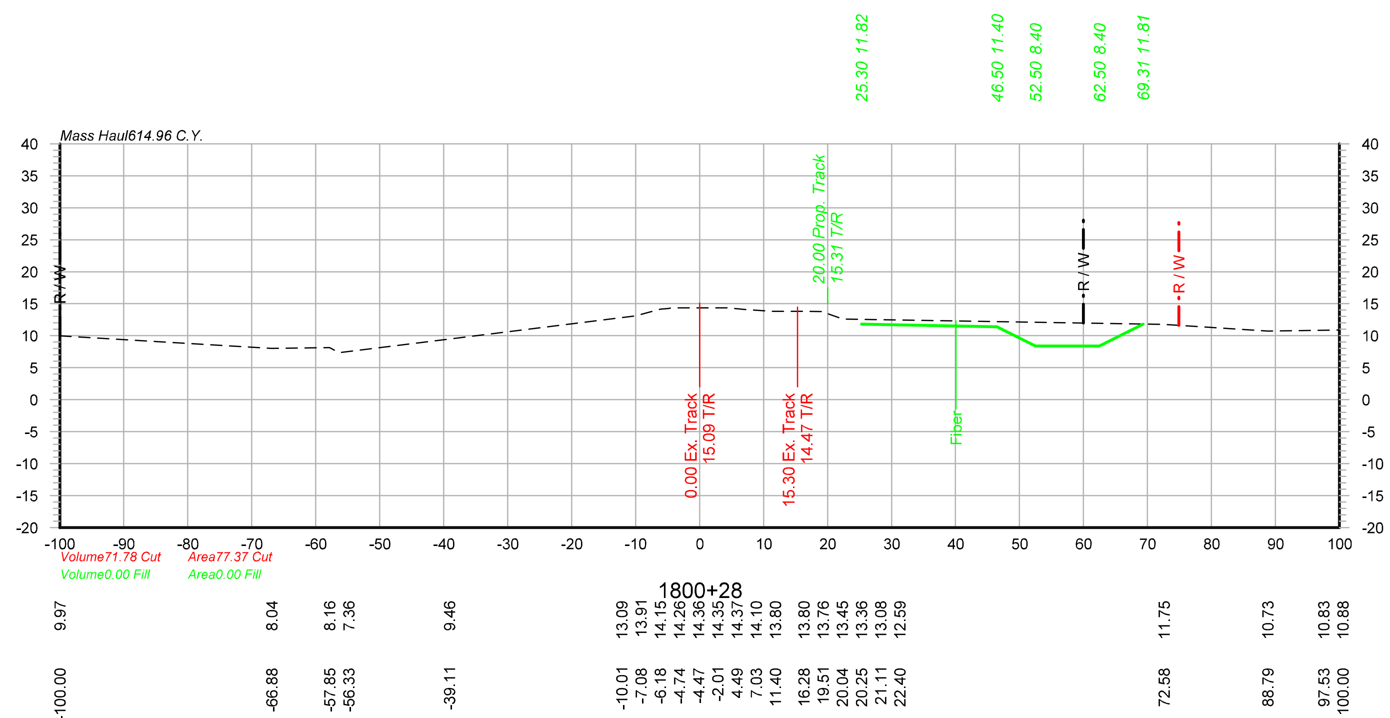

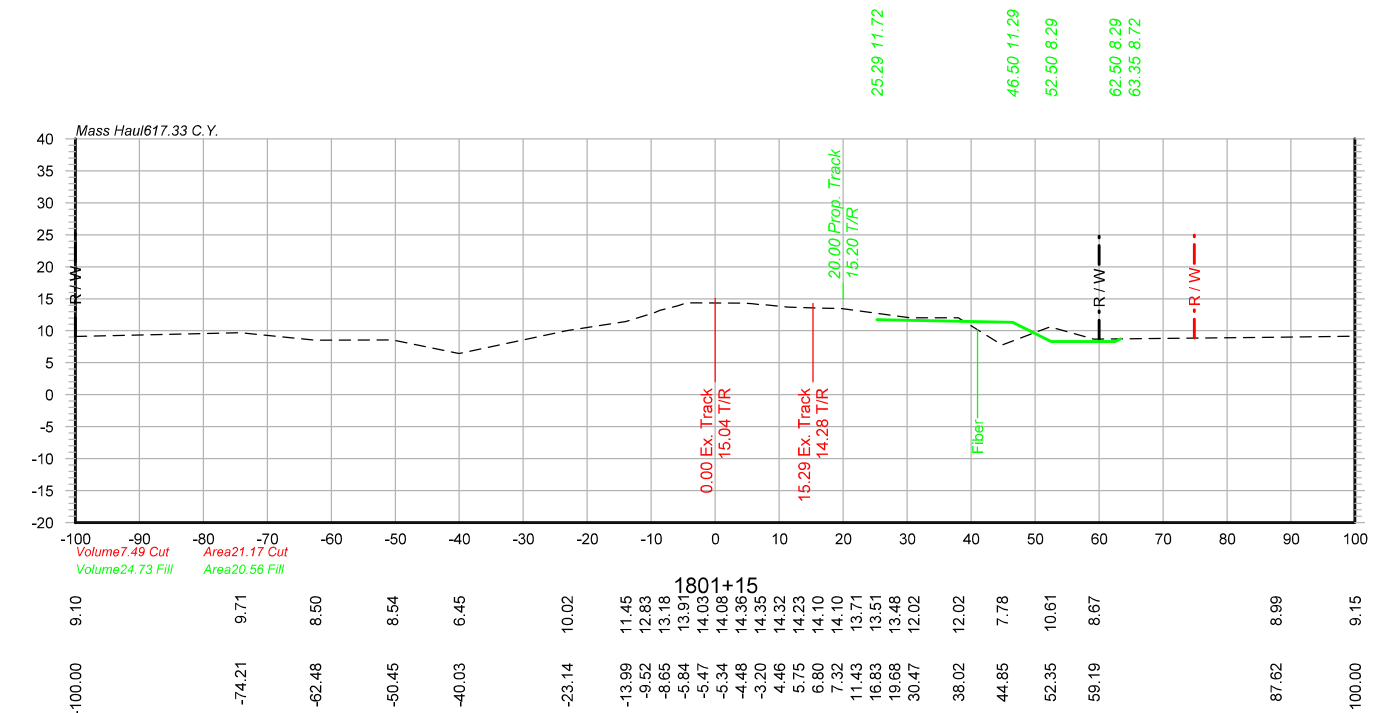

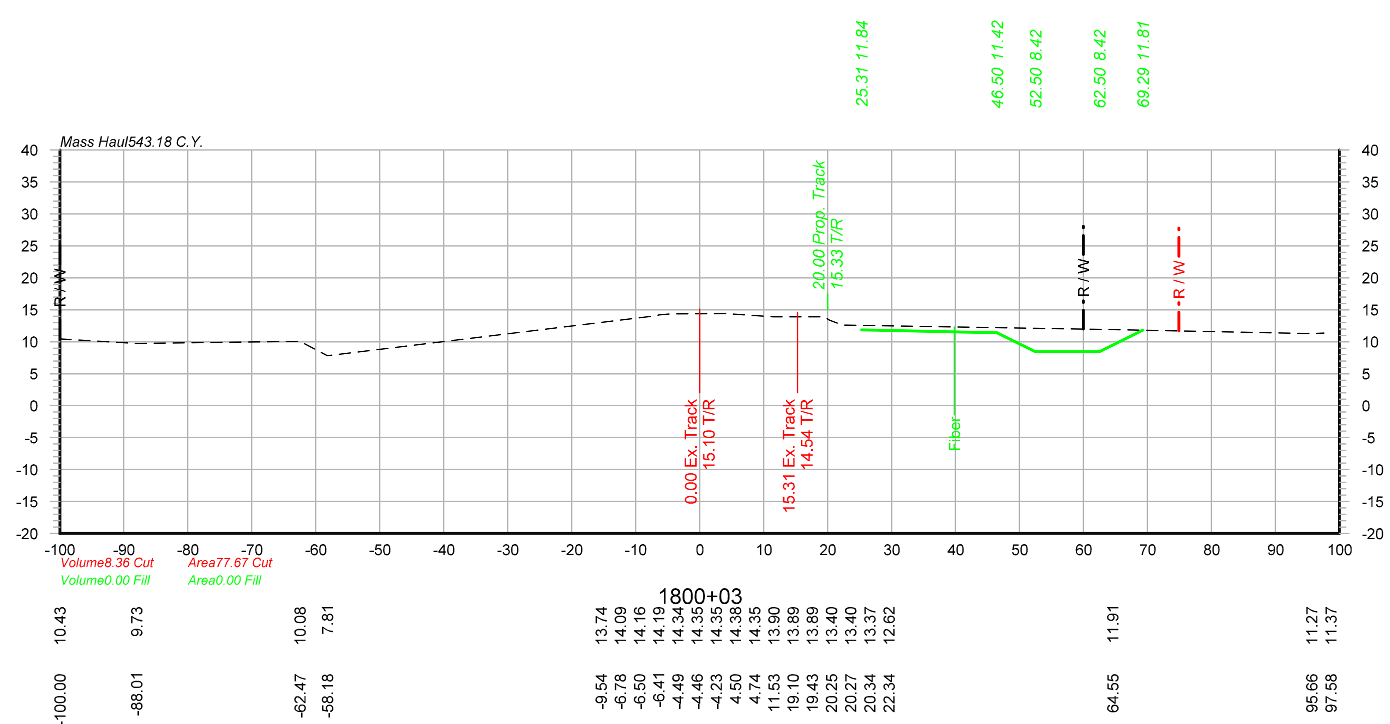

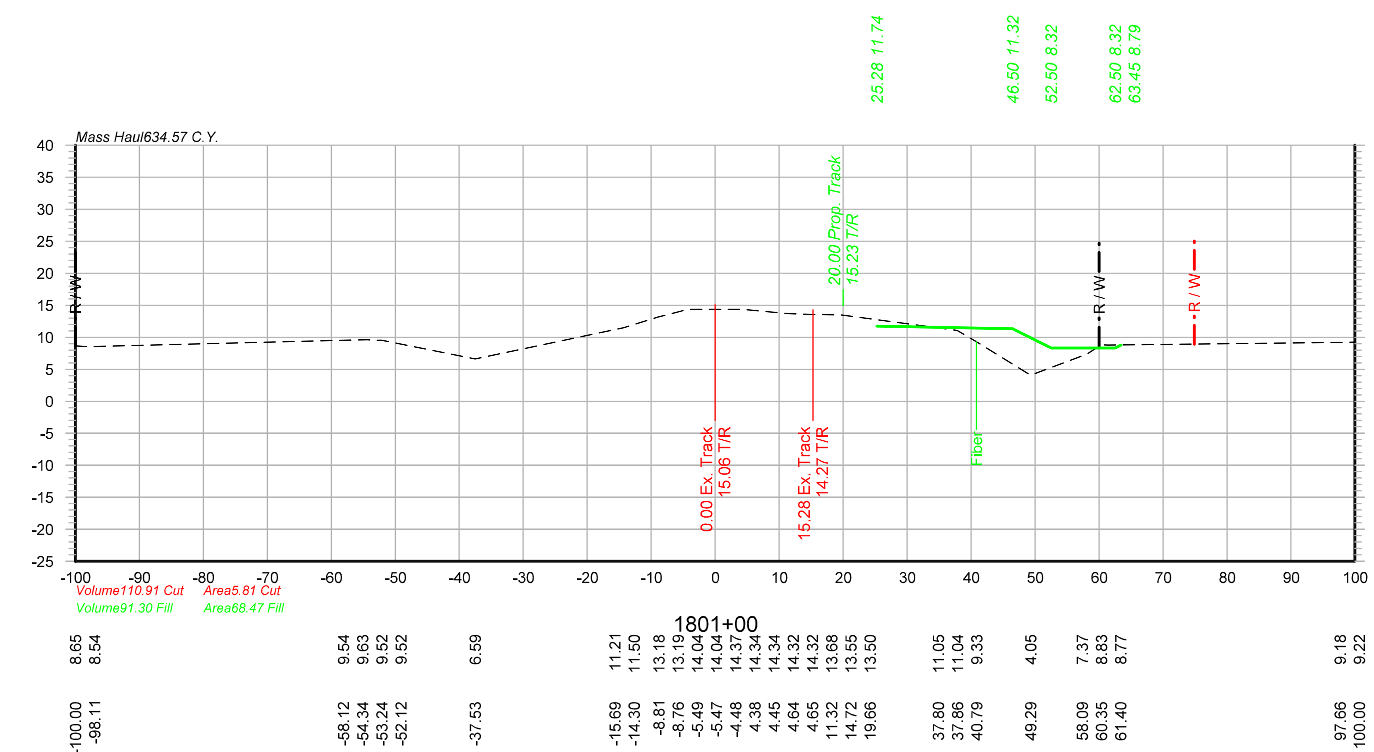

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SHEET NUMBER: X004 of 027

UNION PACIFIC RAILROAD
Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1800+03 TO STA.1801+15

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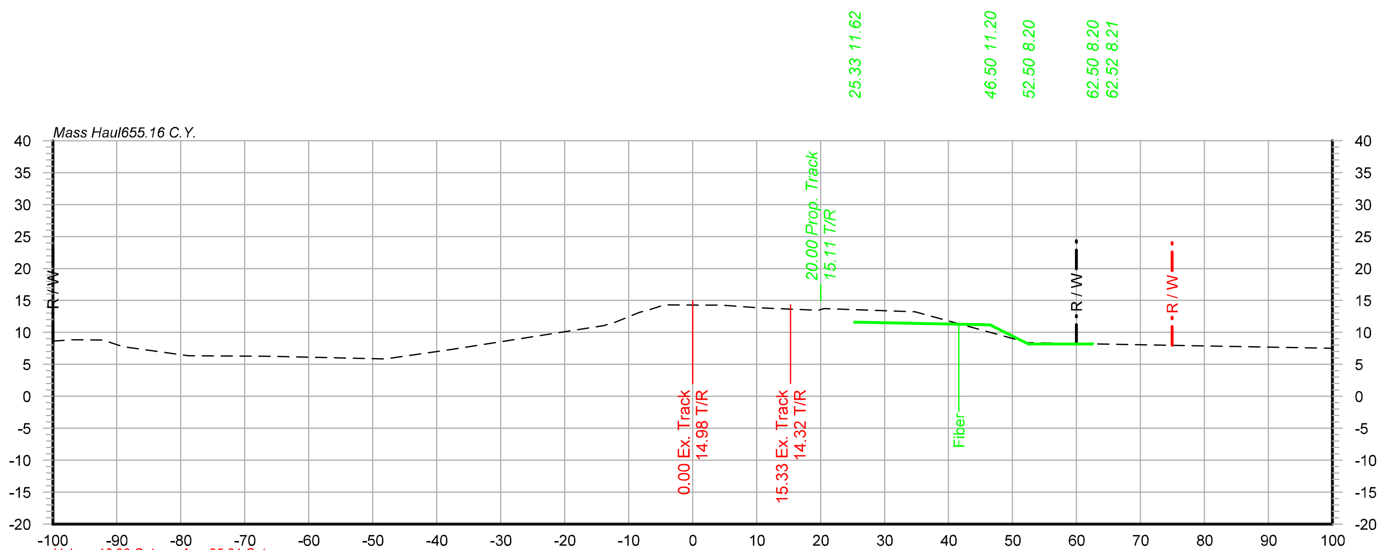
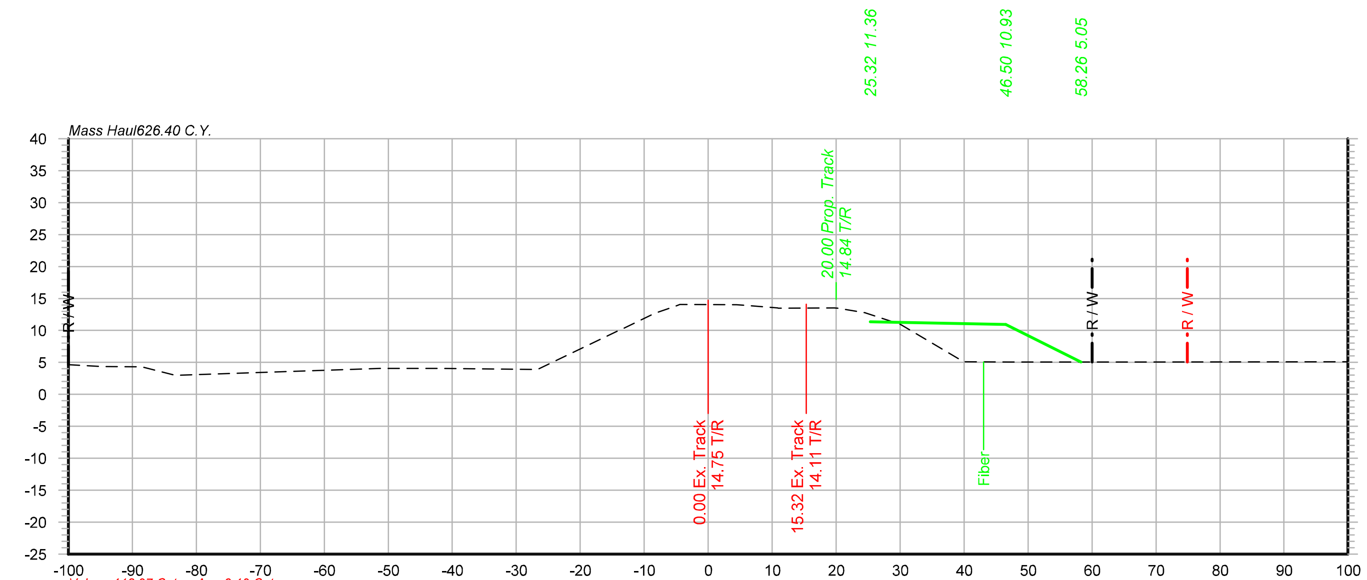


Volume16.92 Cut Area25.21 Cut
Volume1.91 Fill Area5.77 Fill

1801+65

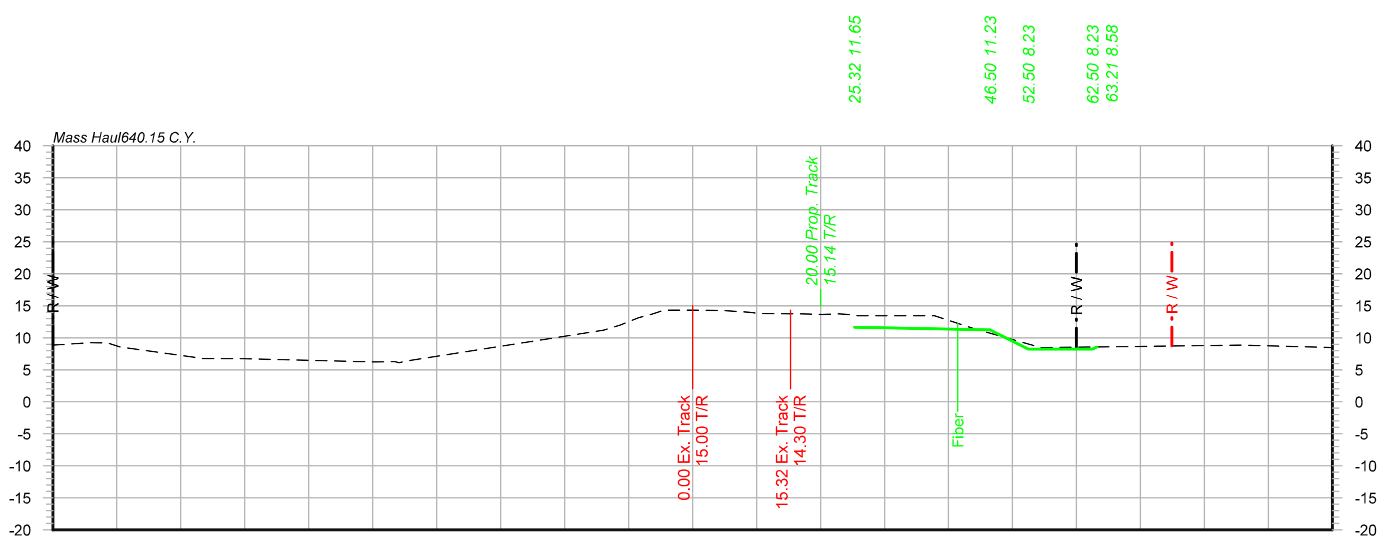
8.66	-100.00
8.86	-96.75
8.81	-92.20
7.78	-89.02
6.37	-78.82
6.28	-66.15
5.84	-48.06
7.35	-37.58
11.06	-13.90
11.62	-12.07
13.13	-8.29
13.43	-7.12
13.98	-5.42
14.21	-4.83
14.32	-4.47
14.28	1.34
14.27	4.50
13.90	9.67
13.85	10.81
13.81	11.27
13.49	19.29
13.49	19.58
13.47	19.73
13.72	20.53
13.24	34.79
8.61	51.67
8.45	52.14
8.40	52.32
8.40	52.47
8.41	52.86
8.36	54.68
7.50	100.00



Volume113.97 Cut Area2.19 Cut
Volume193.80 Fill Area104.65 Fill

1803+00

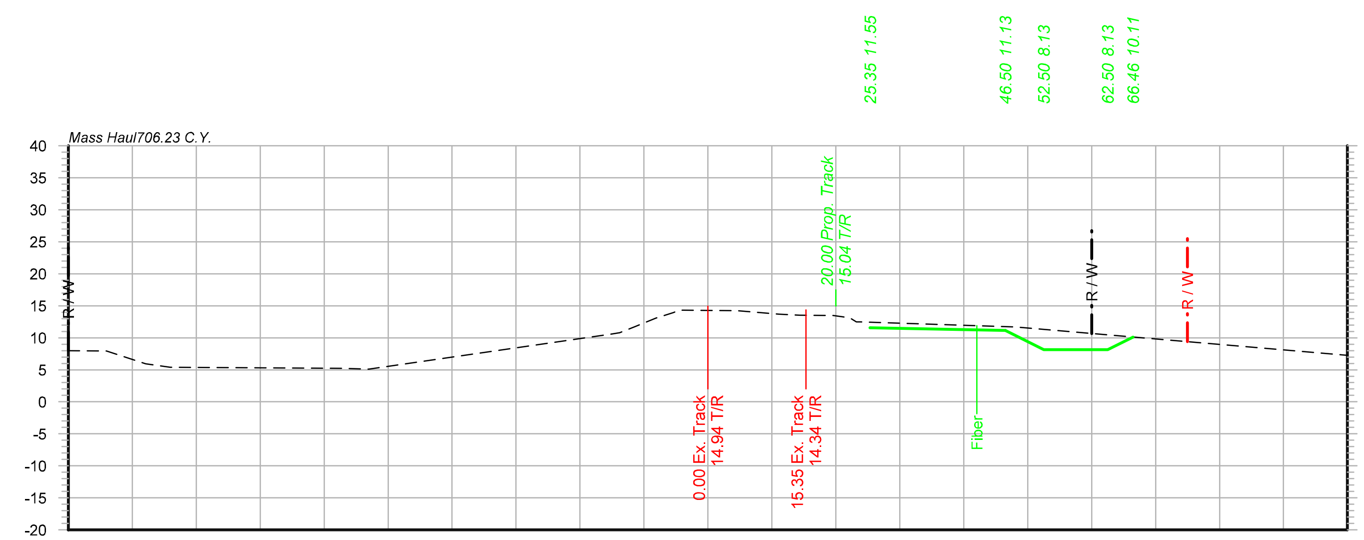
4.64	-100.00
4.36	-94.70
4.31	-88.54
2.96	-83.28
4.07	-51.26
4.07	-41.88
3.90	-26.66
10.01	-13.92
10.02	-13.85
10.04	-13.82
12.68	-8.36
12.69	-8.35
13.78	-5.17
13.78	-5.17
13.78	-5.17
14.05	-4.44
14.04	4.44
14.04	4.46
13.94	5.68
13.50	10.88
13.50	10.97
13.51	19.71
13.48	20.24
12.77	24.52
12.77	24.52
12.73	24.64
11.25	29.21
11.18	29.56
10.87	30.19
5.10	39.92
5.05	47.02
5.05	51.52
5.05	68.62
5.09	100.00



Volume36.85 Cut Area35.69 Cut
Volume14.04 Fill Area1.10 Fill

1801+50

8.85	-100.00
9.22	-94.17
9.19	-91.42
8.56	-89.49
6.78	-76.57
6.73	-69.99
6.24	-49.74
6.25	-46.52
6.12	-45.87
6.34	-44.83
11.17	-13.93
11.98	-11.31
13.15	-8.40
13.58	-6.74
14.00	-5.44
14.17	-4.98
14.34	-4.48
14.30	-0.03
14.29	4.49
13.96	8.95
13.82	10.14
13.81	10.78
13.79	11.43
13.74	17.07
13.63	20.25
13.71	22.87
13.60	24.92
13.45	25.72
13.44	32.37
13.44	37.80
11.45	43.93
8.48	54.38
8.58	63.02
8.87	85.80
8.47	100.00



Volume54.81 Cut Area59.36 Cut
Volume3.74 Fill Area0.00 Fill

1802+00

7.99	-100.00
7.93	-94.03
5.94	-87.91
5.41	-84.07
5.22	-57.17
5.11	-53.03
10.62	-14.91
10.75	-13.93
10.76	-13.87
10.78	-13.84
11.75	-11.41
13.10	-8.03
13.10	-8.02
13.95	-5.39
14.30	-4.47
14.30	-4.47
14.23	4.51
14.23	4.53
14.23	4.56
14.23	4.57
13.67	11.08
13.54	14.36
13.48	19.59
13.27	21.07
13.27	21.08
13.16	21.86
13.01	22.32
12.48	23.23
12.49	23.83
11.68	48.08
7.26	99.87
7.25	100.00

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SHEET NUMBER X005 of 027

UNION PACIFIC RAILROAD
Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1801+50 TO STA.1803+00

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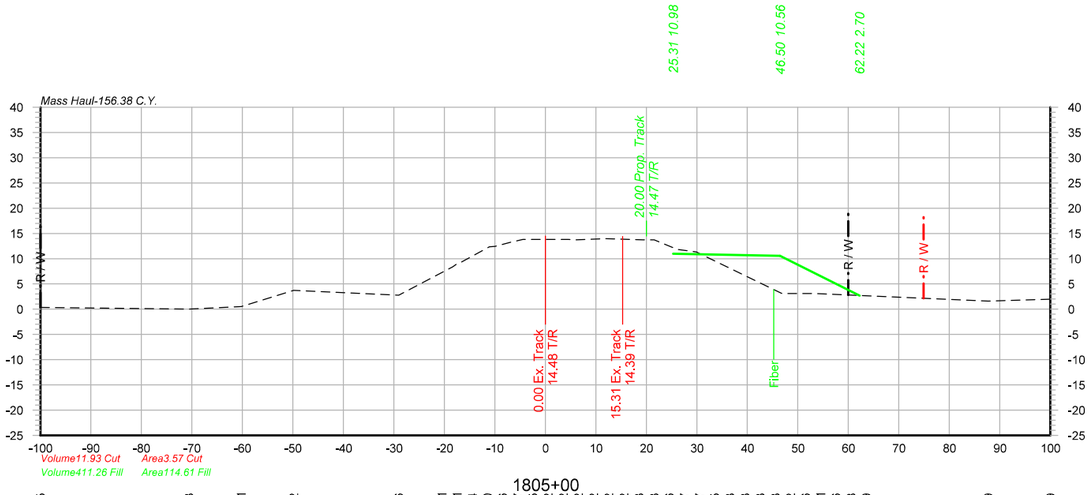
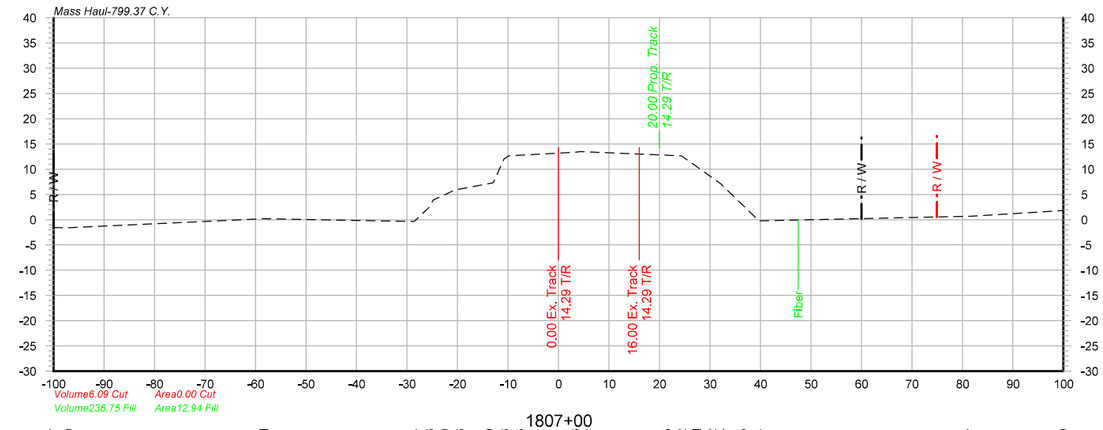


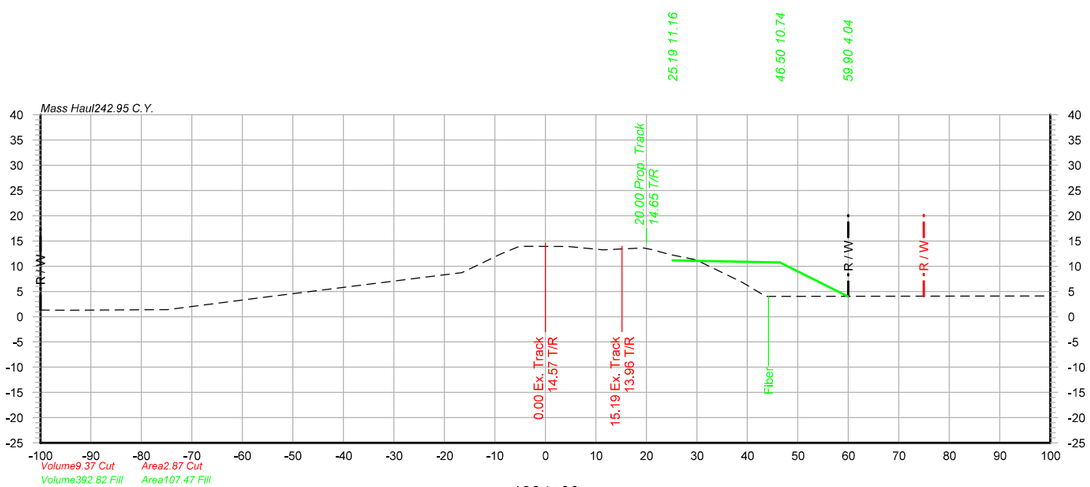
1805+00

0.35	-100.00
0.03	-70.60
0.51	-60.22
3.72	-49.85
2.76	-29.05
8.41	-18.32
9.01	-17.47
9.14	-16.95
9.60	-16.10
12.36	-11.06
12.37	-11.05
12.45	-9.95
13.32	-6.67
13.52	-5.73
13.52	-5.73
13.52	-5.71
13.82	-4.44
13.82	-4.36
13.83	4.52
13.73	6.02
13.96	11.30
13.97	11.44
13.97	11.44
13.75	19.36
13.73	21.53
13.73	21.54
11.83	26.19
11.83	26.20
11.82	26.30
11.36	29.77
11.31	29.96
11.06	30.44
3.08	46.84
3.09	53.35
1.59	87.69
1.99	100.00



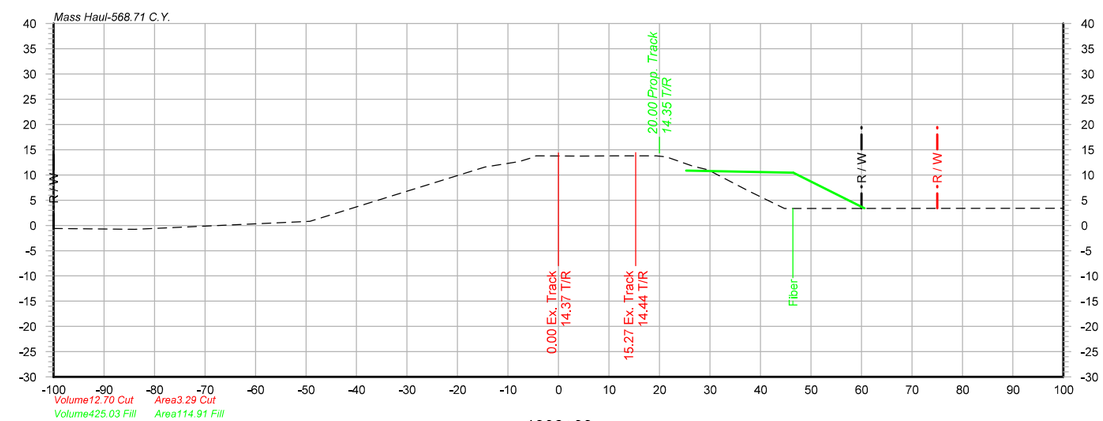
1807+00

-1.57	-100.00
-1.60	-97.36
0.21	-58.38
-0.34	-28.54
2.56	-25.52
3.90	-24.80
5.86	-20.54
7.30	-12.92
12.08	-10.75
12.63	-9.78
13.36	3.33
13.47	4.37
12.65	24.23
12.62	24.37
10.71	27.13
7.22	31.97
7.17	32.06
7.15	32.10
-0.24	39.70
0.67	81.72
1.80	100.00



1804+00

1.31	-100.00
1.26	-94.89
1.38	-75.78
1.38	-75.39
1.39	-74.83
3.90	-55.28
8.70	-16.84
8.71	-16.68
8.79	-16.35
8.81	-16.32
11.07	-11.62
12.40	-8.87
12.40	-8.86
13.79	-5.55
13.93	-4.50
13.93	-4.49
13.93	-4.46
13.91	4.43
13.91	4.47
13.25	11.42
13.62	19.35
13.62	19.44
13.31	20.93
13.31	20.93
12.29	24.79
12.28	24.81
12.27	24.84
11.26	29.81
6.80	38.98
4.04	43.64
4.01	47.05
4.12	100.00



1806+00

-0.61	-100.00
-0.78	-83.91
0.82	-49.24
11.56	-14.55
11.56	-14.55
11.56	-14.54
12.67	-7.75
12.67	-7.75
12.67	-7.74
13.44	-5.19
13.44	-5.19
13.76	-4.48
13.75	4.45
13.75	4.47
13.79	11.29
13.79	11.36
13.79	11.43
13.78	19.34
13.78	19.35
13.55	21.44
11.76	21.49
11.75	26.50
11.03	26.57
6.91	29.58
3.38	37.52
3.40	44.78
	100.00

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UNION PACIFIC RAILROAD

Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1804+00 TO STA.1807+00

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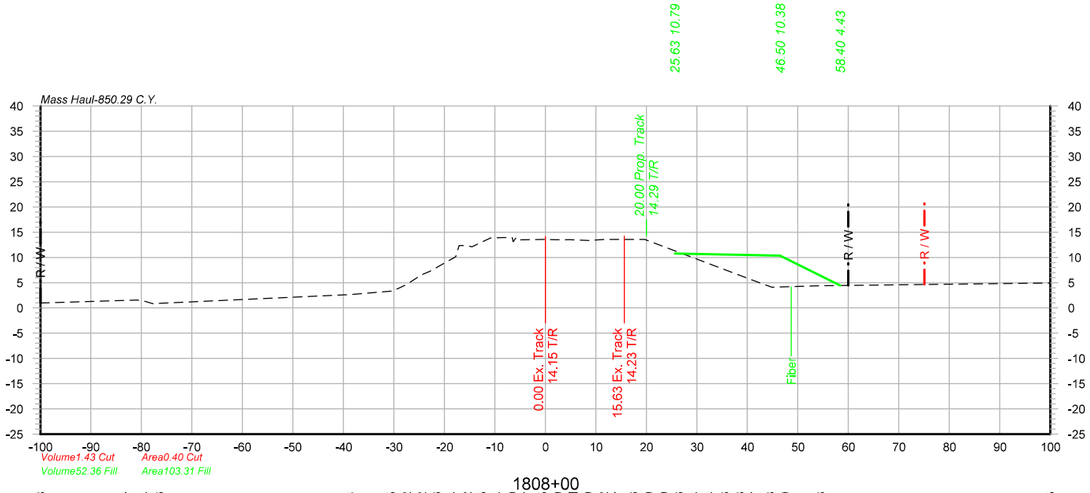
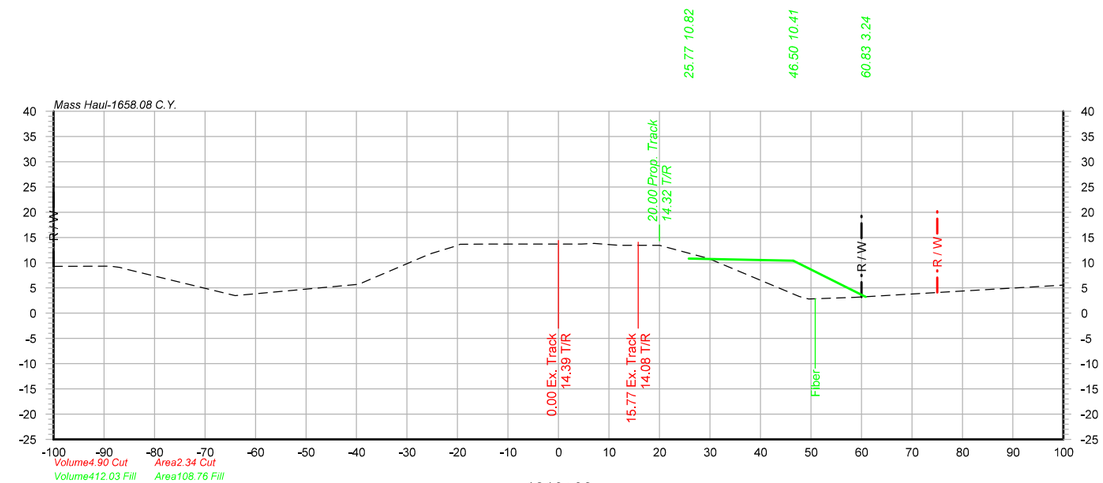


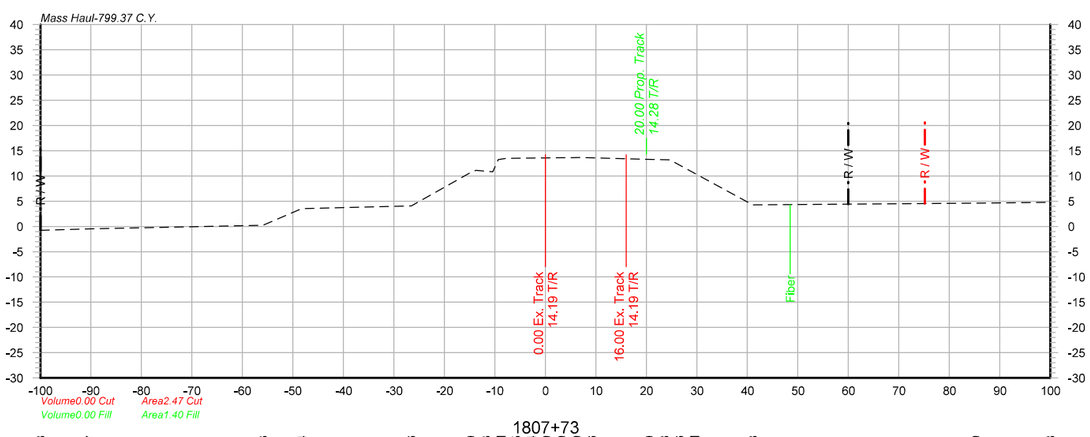
1808+00

0.98	-100.00
1.57	-80.90
1.34	-79.42
0.86	-77.78
2.64	-38.64
3.35	-30.22
4.62	-27.53
6.52	-24.59
7.26	-22.81
10.14	-17.74
11.82	-17.24
12.35	-17.06
12.34	-15.59
12.10	-14.52
13.87	-10.89
13.95	-8.23
13.90	-6.53
13.11	-6.38
14.00	-5.74
13.82	-5.50
13.47	-5.08
13.56	-0.37
13.50	3.28
13.50	4.85
13.46	5.56
13.34	8.53
13.34	8.57
13.58	11.71
13.58	11.82
13.57	19.69
5.28	41.64
4.09	44.87
4.38	54.47
4.95	100.00



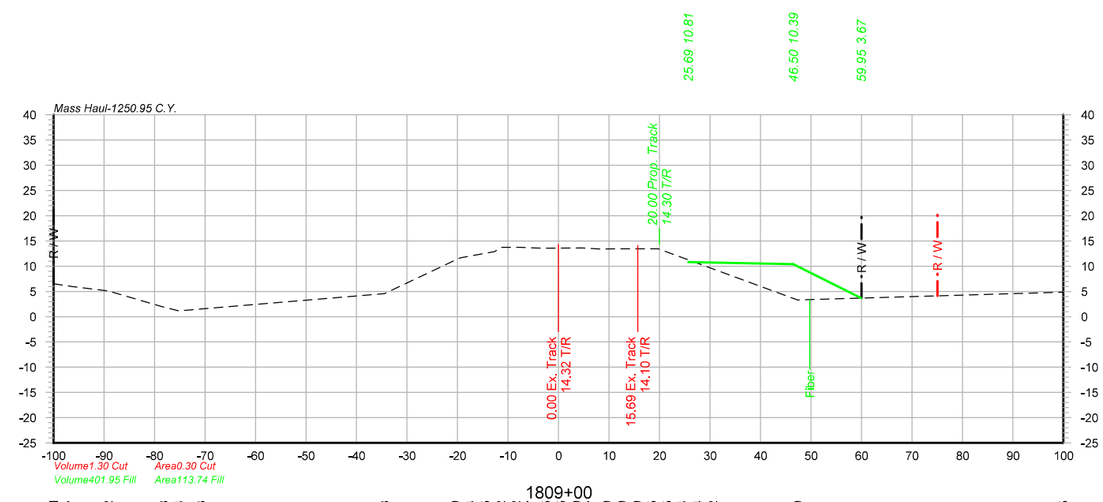
1810+00

9.29	-100.00
9.30	-88.71
9.08	-86.86
8.73	-85.66
3.47	-64.01
5.71	-39.53
6.36	-38.11
11.75	-25.47
13.24	-20.56
13.25	-20.53
13.26	-20.49
13.26	-20.48
13.26	-20.46
13.67	-19.47
13.67	-19.16
13.67	-13.83
13.67	-11.36
13.67	-11.33
13.67	-11.28
13.67	-5.06
13.67	-4.34
13.67	-4.33
13.67	-4.33
13.70	4.53
13.70	4.53
13.70	7.07
13.80	11.99
13.43	12.00
13.43	12.00
13.43	19.98
13.42	28.55
11.16	29.46
10.93	47.67
3.32	49.55
2.81	58.84
3.13	
5.56	100.00



1807+73

-0.78	-100.00
-0.47	-90.16
0.23	-55.94
3.54	-48.27
4.06	-26.54
10.69	-14.78
11.13	-13.73
10.81	-10.43
13.25	-9.34
13.44	-8.01
13.50	-7.23
13.60	3.25
13.60	5.04
13.66	6.89
13.29	20.56
13.18	24.53
13.16	24.69
13.11	24.80
4.28	41.08
4.60	85.25
4.78	100.00



1809+00

6.51	-100.00
5.97	-96.39
5.12	-89.21
1.88	-78.22
1.14	-75.14
1.53	-70.84
4.58	-34.49
11.20	-20.48
11.64	-19.49
12.85	-12.84
12.92	-12.61
13.02	-12.41
13.07	-12.38
13.75	-11.32
13.75	-7.50
13.60	-4.72
13.57	-3.03
13.60	4.69
13.40	8.21
13.40	8.21
13.45	11.79
13.45	11.81
13.44	19.77
13.44	19.79
13.42	19.85
3.30	47.36
4.85	100.00

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UNION PACIFIC RAILROAD
Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1807+73 TO STA.1810+00

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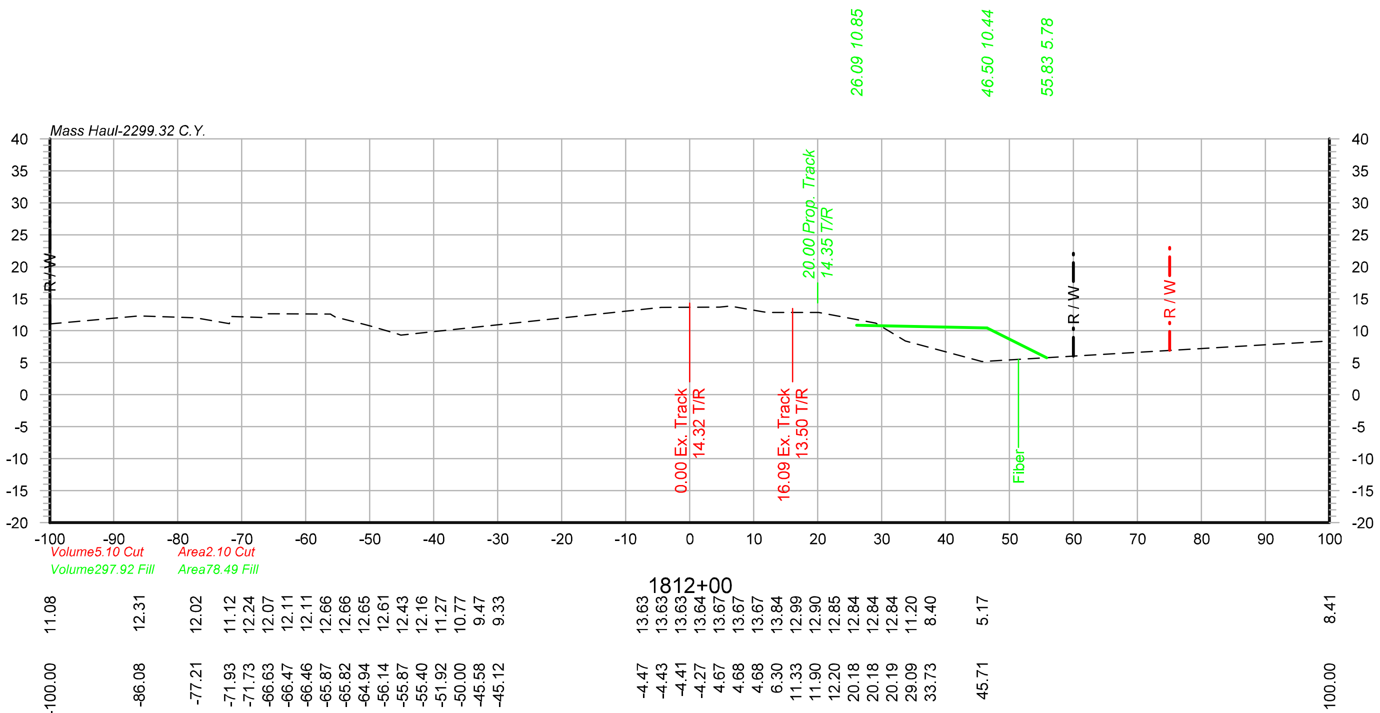

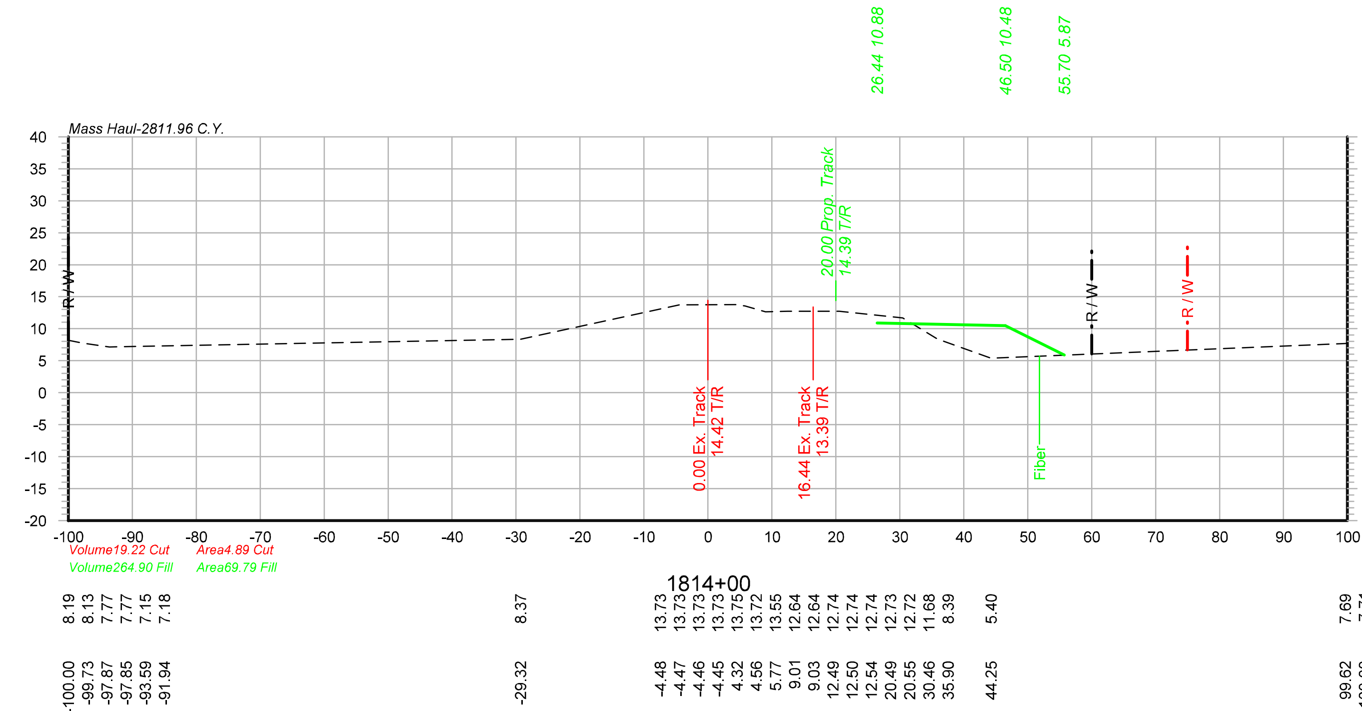

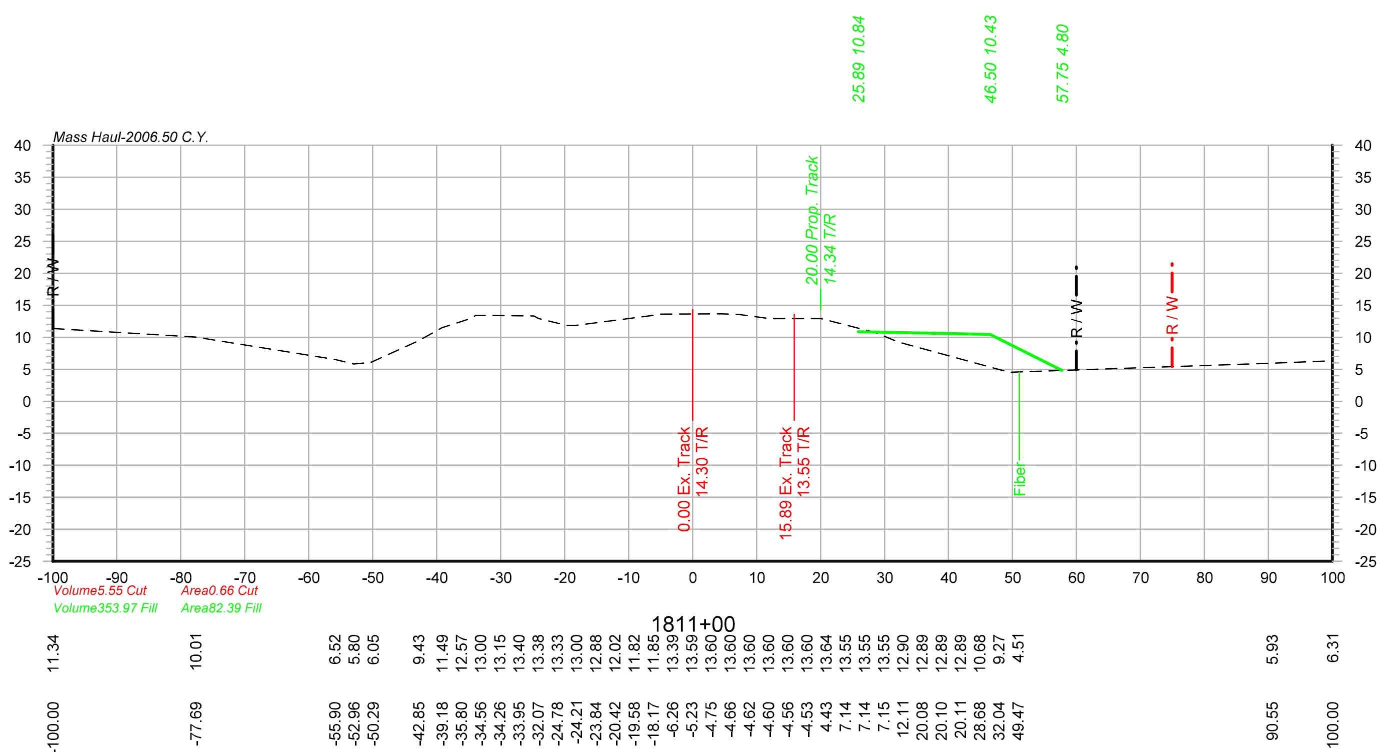

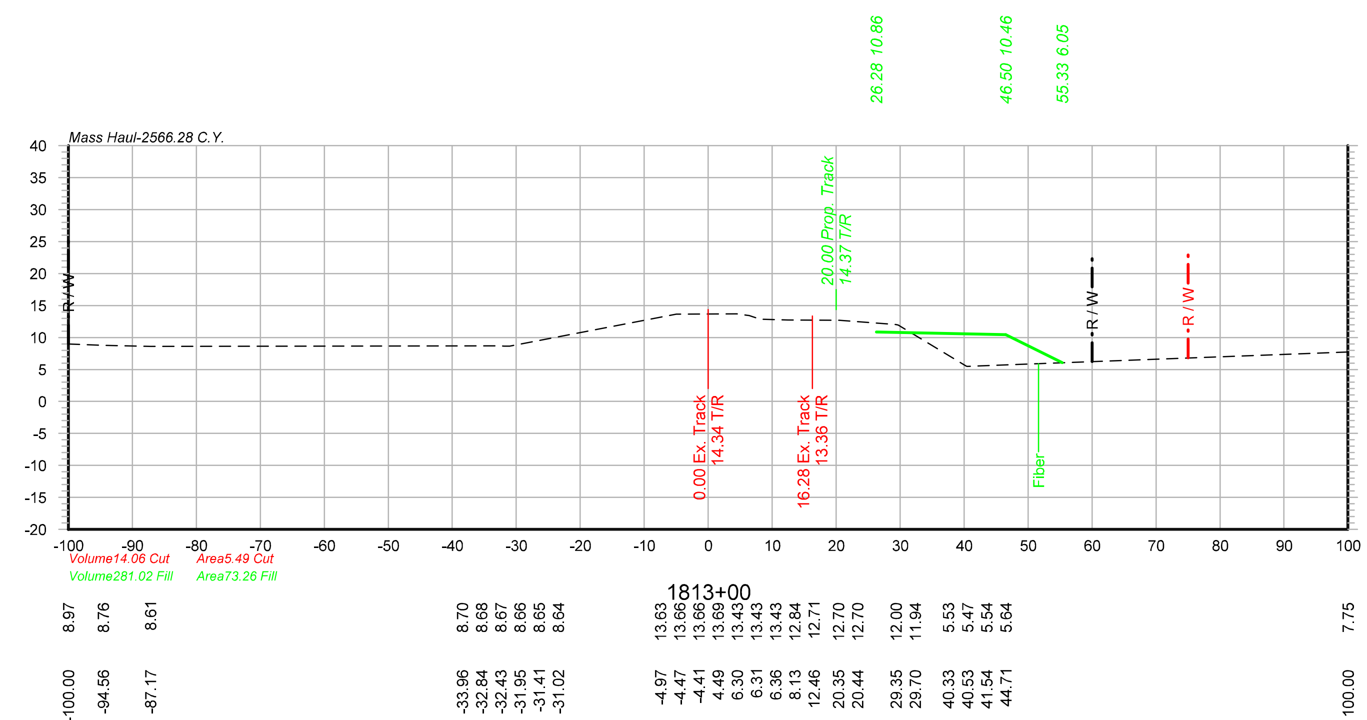

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SHEET NUMBER X008 of 027

UNION PACIFIC RAILROAD
Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1811+00 TO STA.1814+00

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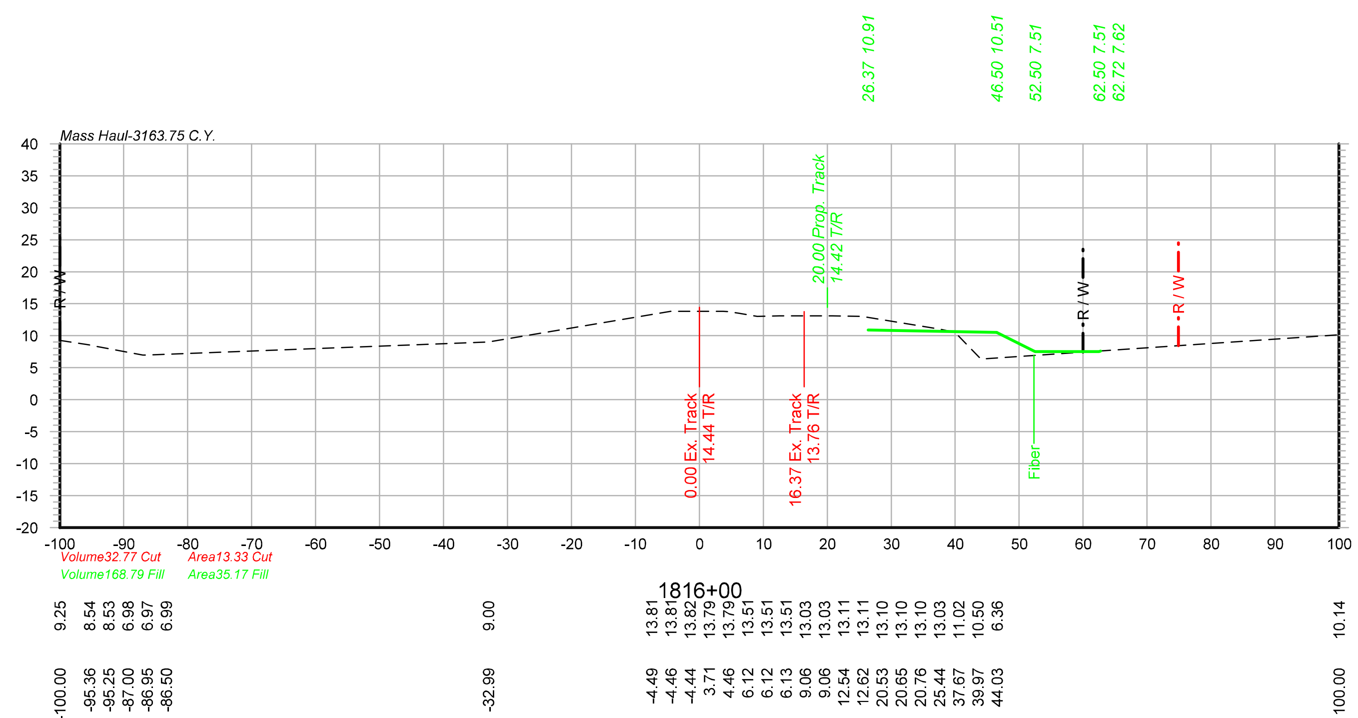

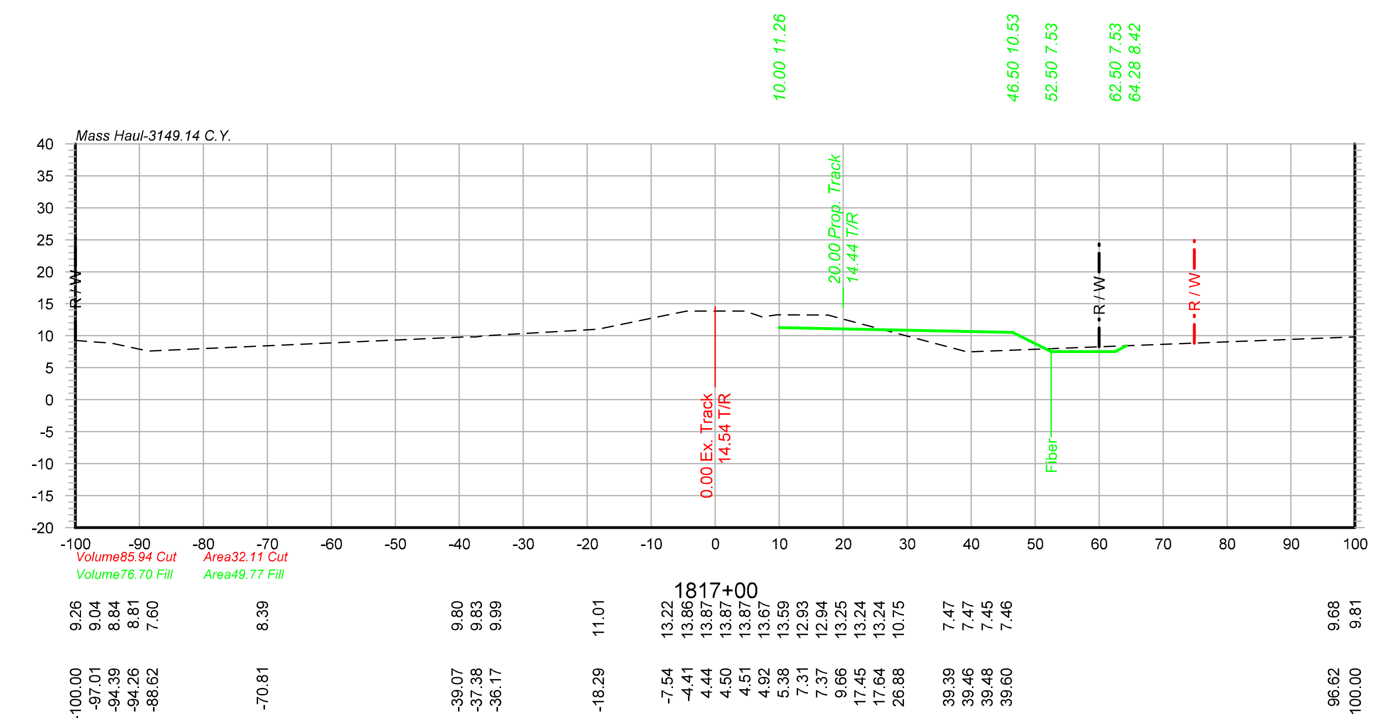

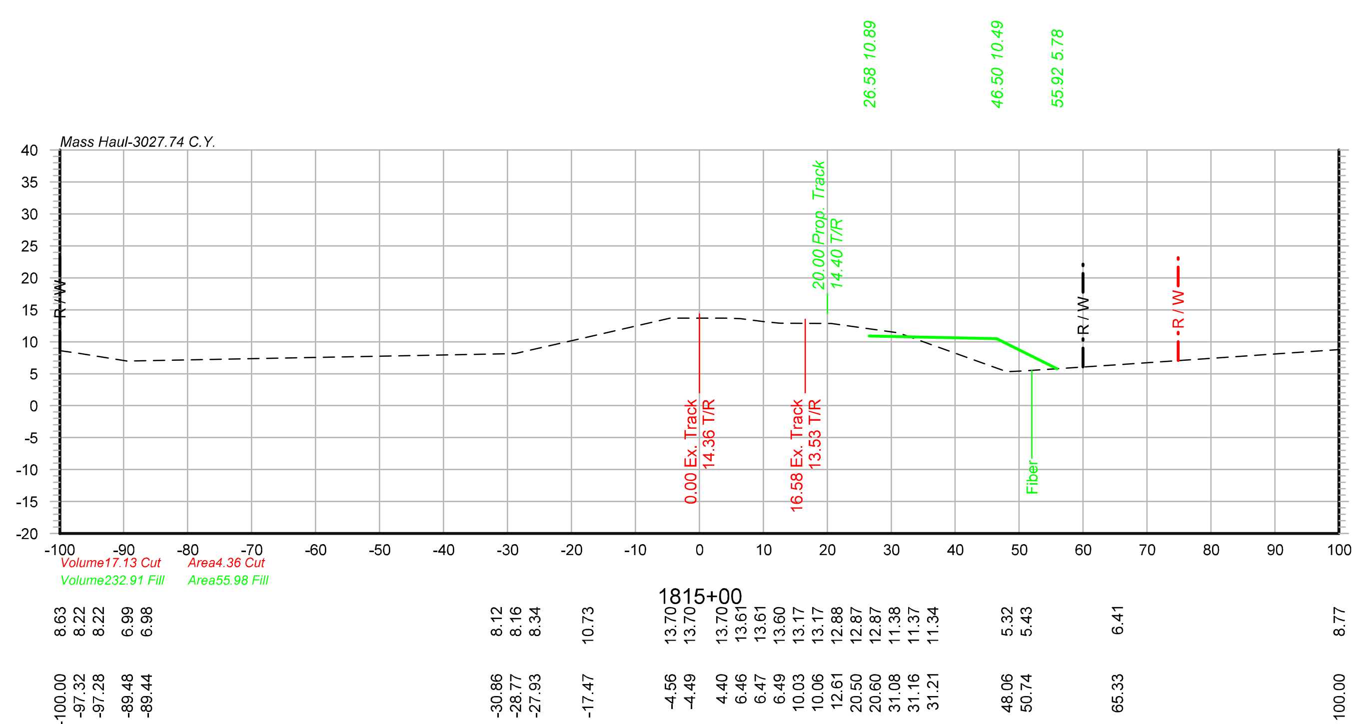

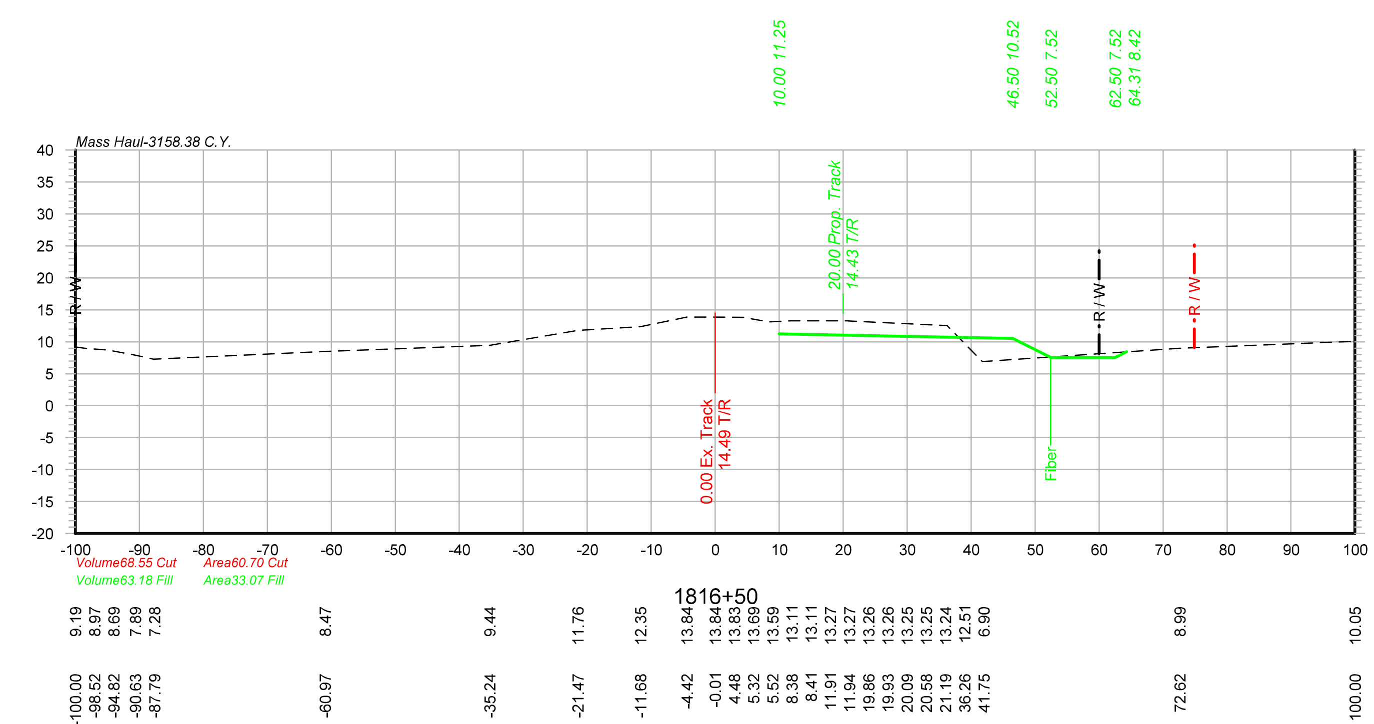

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262-652-6677Job No. 20152.03

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CHECKED BY:	MJK
DATE:	09/06/13
SHEET NUMBER	X009 of 027

UNION PACIFIC RAILROAD

Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1815+00 TO STA.1817+00

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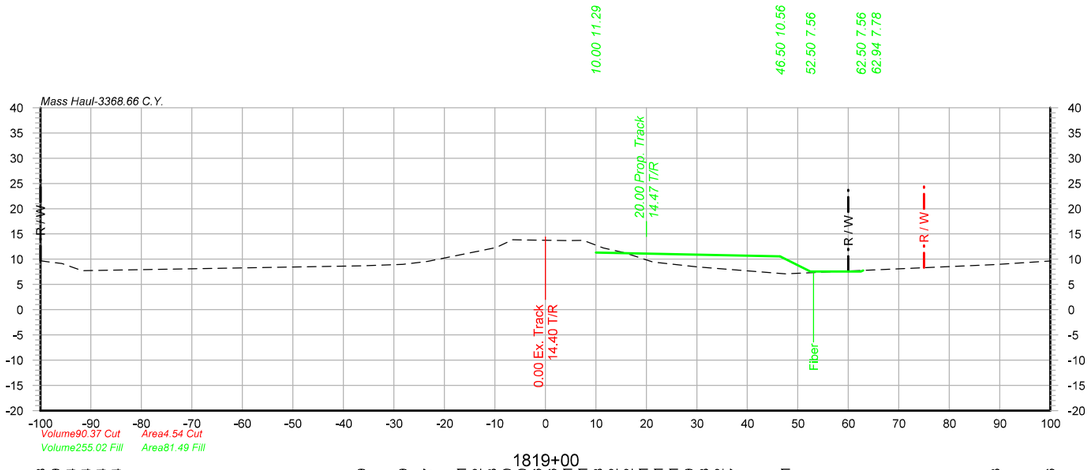
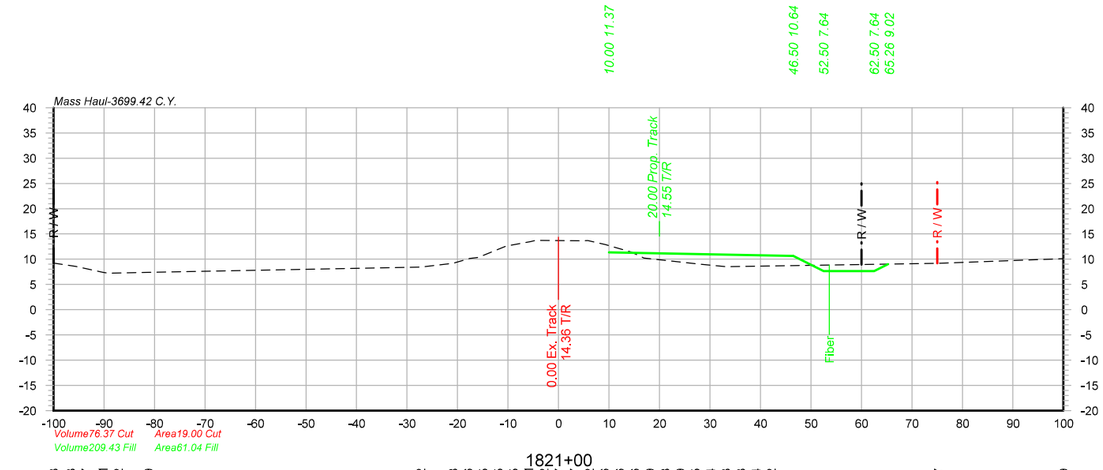


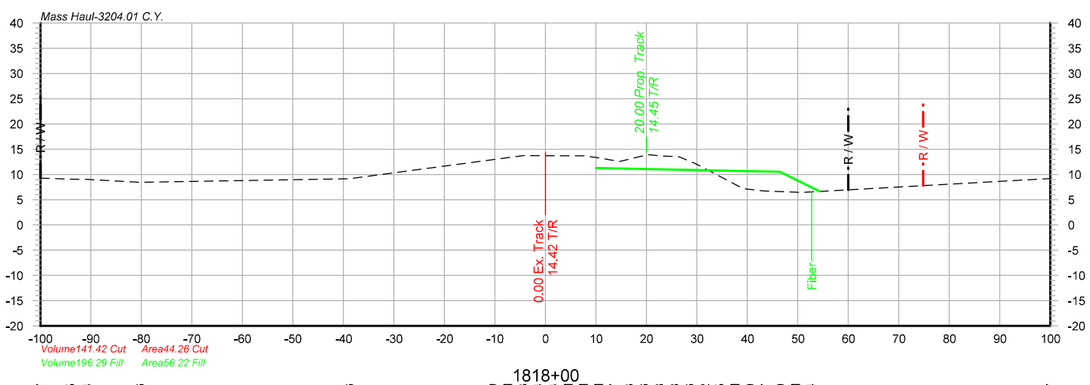
1819+00

9.68	-100.00
9.49	-98.46
9.14	-95.73
7.74	-91.73
7.74	-91.72
7.74	-91.65
8.69	-36.44
8.99	-28.23
9.57	-23.34
11.51	-13.64
11.52	-13.61
11.53	-13.57
12.30	-9.75
12.30	-9.74
13.86	-6.48
13.86	-6.48
13.81	-4.54
13.81	-4.50
13.68	4.43
13.72	7.50
13.72	7.50
12.21	11.47
12.21	11.47
12.21	11.47
11.29	15.72
11.28	15.73
9.42	21.32
8.47	30.08
7.11	47.53
8.93	89.09
9.66	100.00



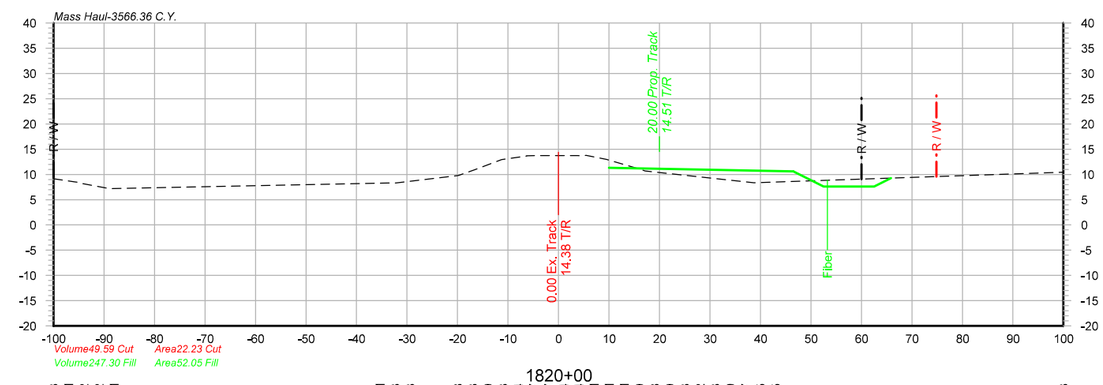
1821+00

9.23	-100.00
8.73	-96.61
8.57	-95.55
7.41	-90.19
7.22	-89.13
7.39	-81.21
8.42	-27.31
9.18	-20.89
10.16	-17.60
10.35	-15.88
10.35	-15.88
10.35	-15.88
12.61	-10.35
12.82	-9.18
13.47	-5.57
13.47	-5.56
13.72	-4.53
13.66	4.36
13.66	4.43
13.66	4.43
13.69	5.79
13.68	5.83
12.89	9.27
11.45	14.32
11.44	14.38
11.43	14.38
10.23	16.92
9.04	27.97
8.52	33.22
9.17	75.22
10.09	100.00



1818+00

9.27	-100.00
9.05	-94.05
9.04	-90.77
8.46	-80.29
9.16	-38.82
13.70	-4.67
13.71	-4.57
13.73	-4.47
13.74	-4.40
13.74	-4.38
13.71	3.94
13.71	3.95
13.71	4.07
13.67	7.61
13.33	10.35
12.56	14.74
13.58	18.79
13.88	20.58
13.66	23.03
13.52	26.16
13.45	26.63
13.41	26.74
12.09	29.80
7.17	39.20
7.09	39.88
6.71	43.24
6.44	50.84
9.17	100.00



1820+00

9.13	-100.00
8.51	-95.76
8.42	-95.09
8.22	-94.51
7.21	-88.90
8.31	-33.33
8.33	-32.35
8.33	-32.20
9.78	-19.97
9.83	-19.74
10.89	-16.69
12.93	-11.27
12.94	-11.26
13.67	-6.30
13.67	-6.29
13.74	-4.60
13.74	-4.60
13.71	3.84
13.71	4.34
13.71	4.35
13.79	5.49
13.78	5.52
12.99	9.51
11.03	16.20
11.02	16.22
10.73	17.06
10.70	17.12
8.37	38.65
8.35	38.96
8.45	41.30
10.43	100.00

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DRAWN BY: HRD	UNION PACIFIC RAILROAD — Office of Assistant Vice President Engineering Design/Construction
CHECKED BY: MJK	LOCATION & DESCRIPTION: CONSTRUCT CALCASIEU RUN-THROUGH SLOT LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)
DATE: 09/06/13	
SHEET NUMBER X010 of 027	SHEET TITLE: CROSS SECTIONS STA.1818+00 TO STA.1821+00

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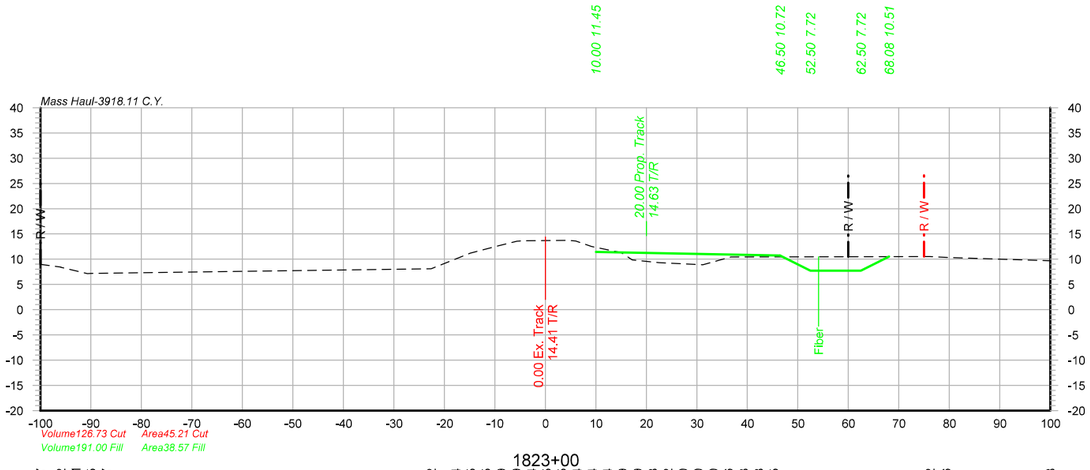

1823+00

8.97	-100.00
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7.17	-89.98
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11.24	-14.78
11.25	-14.75
11.25	-14.75
12.59	-9.50
12.59	-9.49
13.54	-5.61
13.55	-5.60
13.55	-5.59
13.64	-4.47
13.74	4.46
13.74	4.53
13.59	6.00
13.59	6.00
13.58	6.02
12.52	9.14
11.30	14.99
11.30	15.00
11.30	15.01
9.86	17.22
9.33	22.55
8.88	31.19
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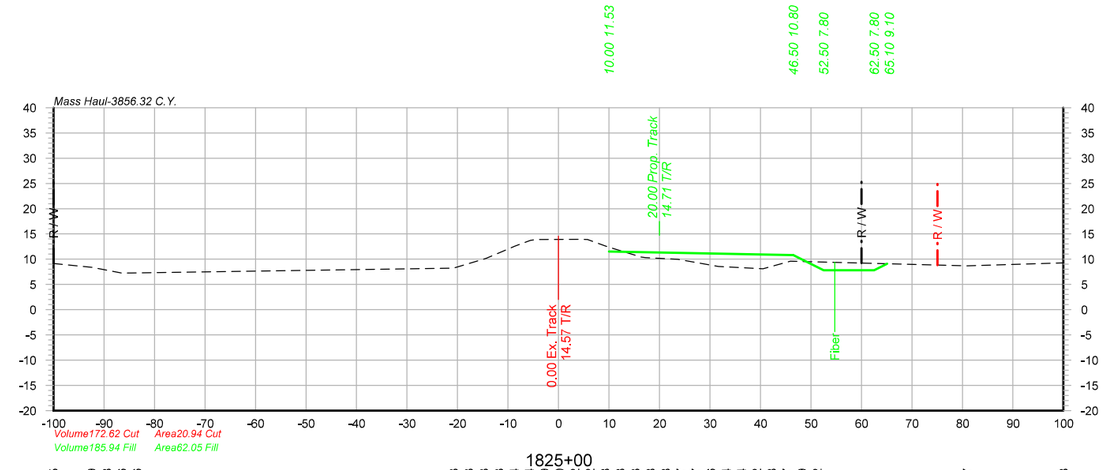
10.52	76.16
10.36	79.40
9.68	100.00



1825+00

9.15	-100.00
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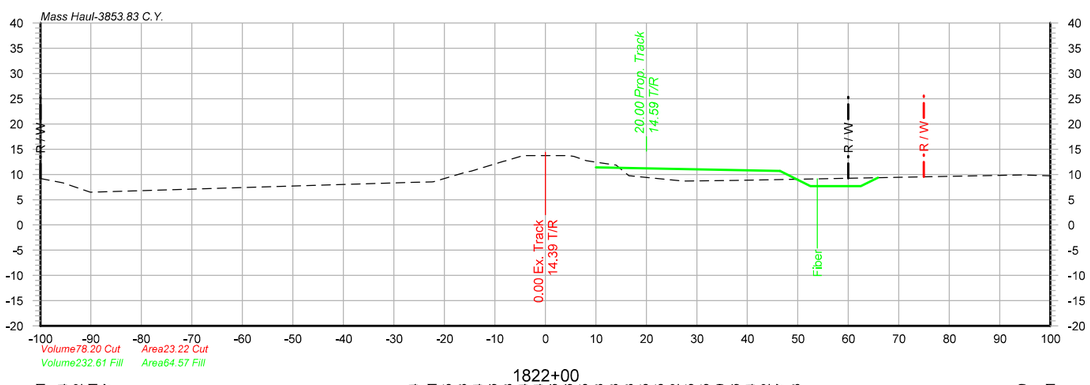
8.38	-92.40
7.26	-86.57
7.26	-84.63
8.23	-20.79
10.13	-14.40
10.13	-14.39
10.13	-14.38
10.14	-14.37
11.14	-12.00
12.59	-8.60
12.60	-8.58
13.72	-5.56
13.72	-5.55
13.88	-4.41
13.88	-4.33
13.93	4.60
13.88	5.84
13.88	5.85
13.87	5.87
12.47	9.64
10.46	16.22
10.44	16.27
10.32	16.29
9.98	17.25
8.57	23.65
8.09	31.68
9.62	40.52
45.94	
8.67	80.93
9.28	100.00



1822+00

9.21	-100.00
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8.32	-95.49
6.51	-90.24
6.47	-90.05
8.44	-26.16
8.51	-22.45
8.55	-22.13
10.53	-15.48
10.54	-15.40
10.66	-14.70
12.63	-8.10
12.64	-8.08
12.64	-8.05
13.36	-5.65
13.36	-5.65
13.75	-4.38
13.73	4.61
13.73	4.61
13.73	4.61
13.55	5.68
13.55	5.68
12.72	8.08
12.45	9.91
11.85	14.00
11.59	14.31
9.76	16.51
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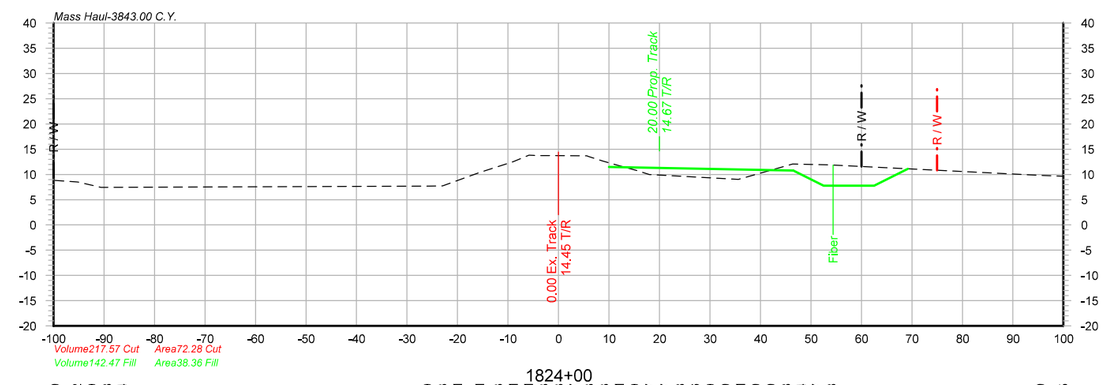
9.72	16.73
8.67	27.32
8.83	37.54
9.90	94.39
9.71	100.00



1824+00

8.80	-99.71
8.52	-95.44
8.49	-95.06
7.48	-90.77
7.44	-90.56
7.69	-25.62
7.73	-22.98
7.81	-22.71
10.41	-15.61
12.43	-9.21
12.51	-8.95
12.51	-8.95
13.83	-5.86
13.83	-5.86
13.77	-4.92
13.73	-4.38
13.73	-4.38
13.71	-0.85
13.69	4.59
13.67	5.40
13.67	5.62
13.58	5.90
12.66	8.80
11.79	11.88
10.80	15.36
10.01	17.86
10.00	17.87
10.00	17.96
9.98	18.07
9.04	35.63
12.07	46.39
11.88	53.56
9.80	95.45
9.65	100.00

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DATE: 09/06/13
SHEET NUMBER X011 of 027

UNION PACIFIC RAILROAD

Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1822+00 TO STA.1825+00

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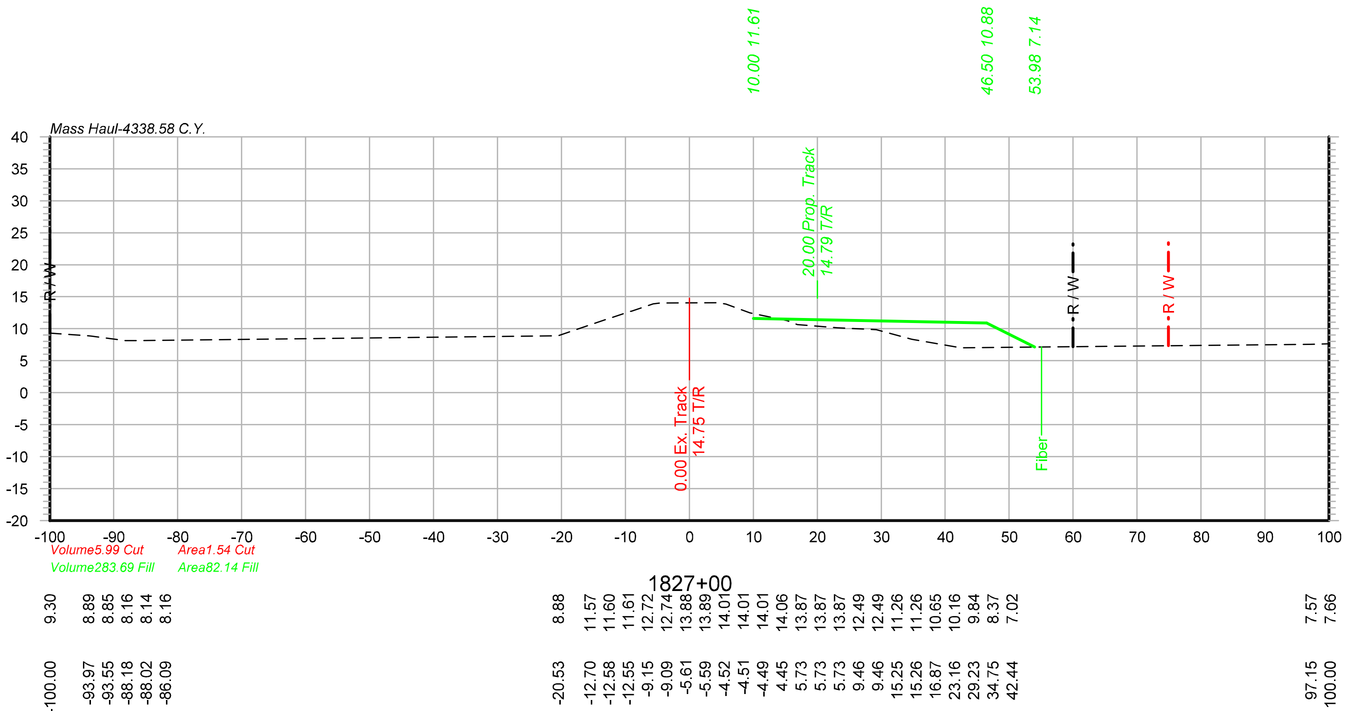

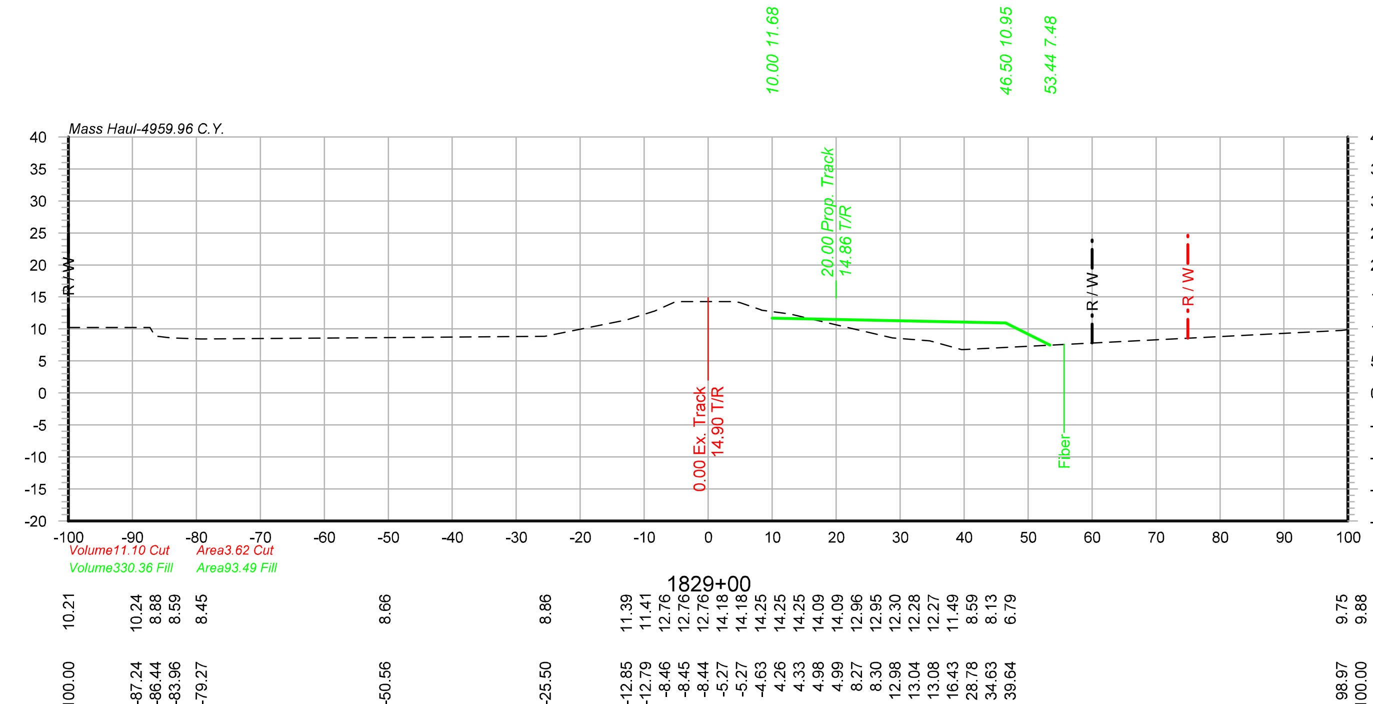

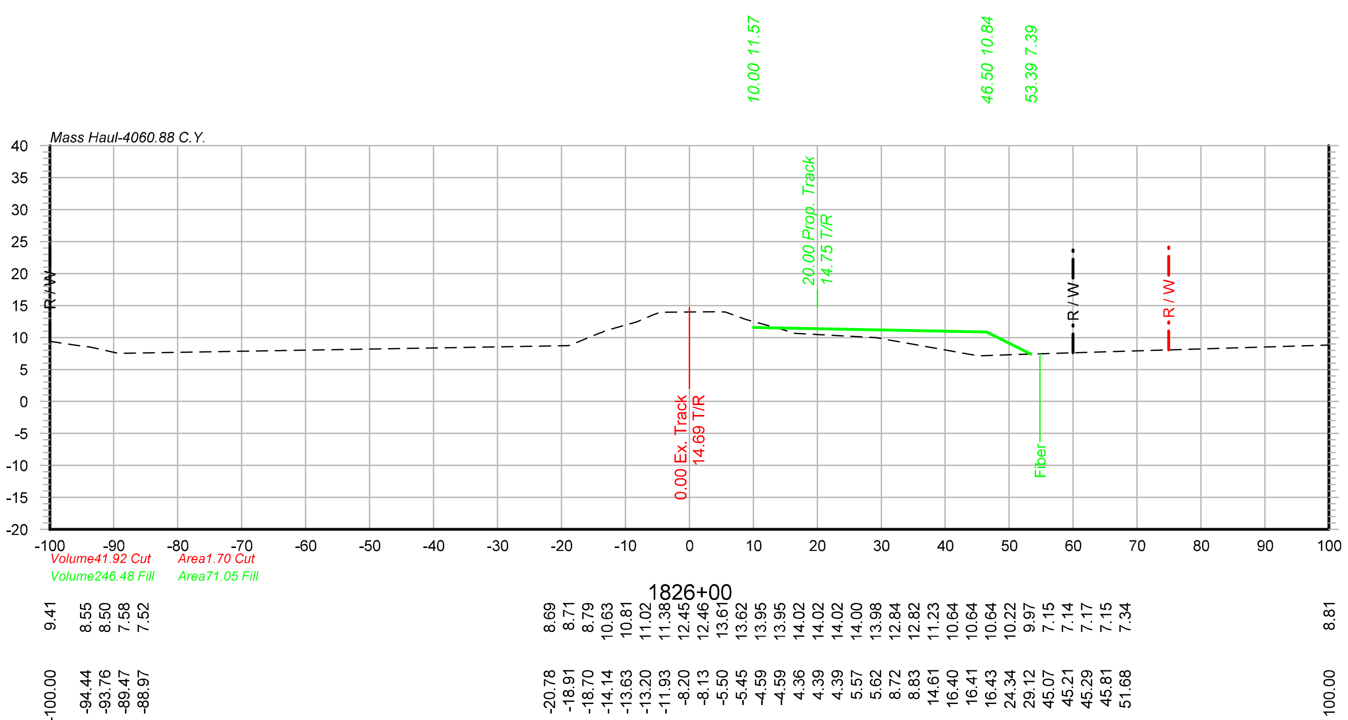

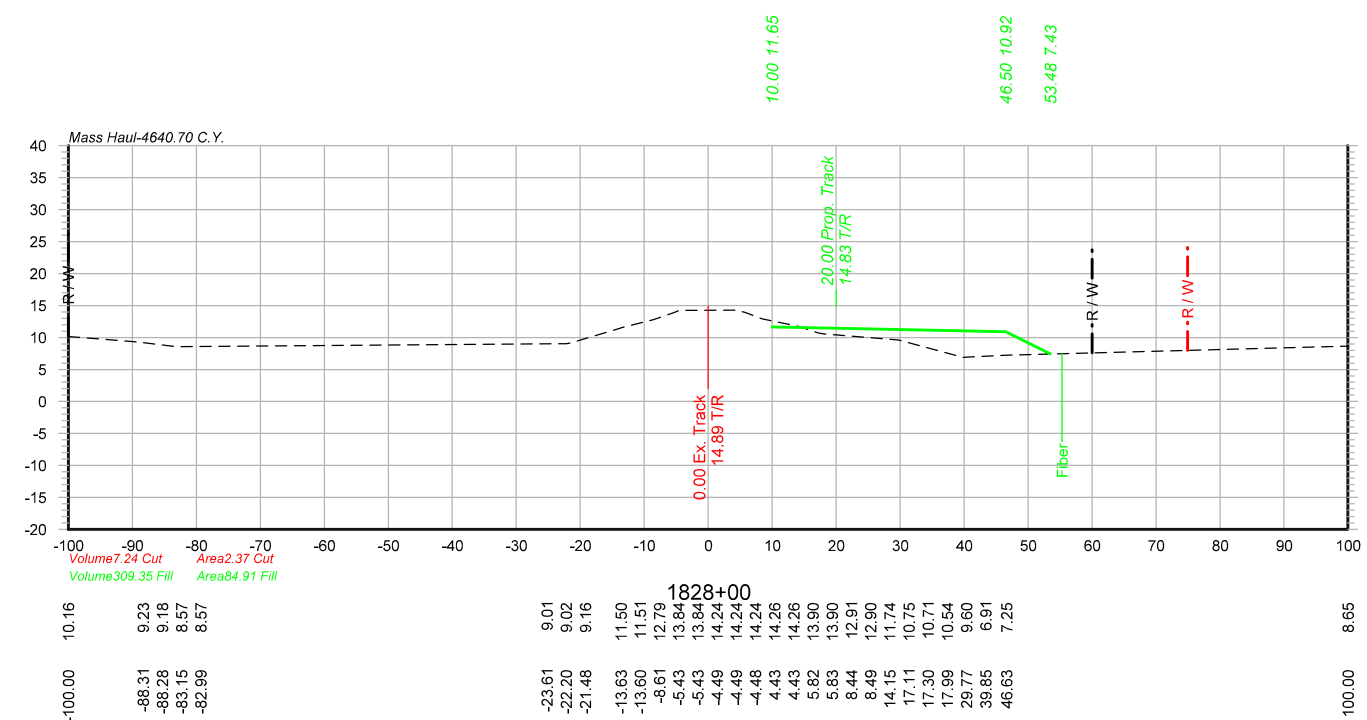

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CHECKED BY: MJK	LOCATION & DESCRIPTION: CONSTRUCT CALCASIEU RUN-THROUGH SLOT LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)
DATE: 09/06/13	
SHEET NUMBER X012 of 027	SHEET TITLE: CROSS SECTIONS STA.1826+00 TO STA.1829+00

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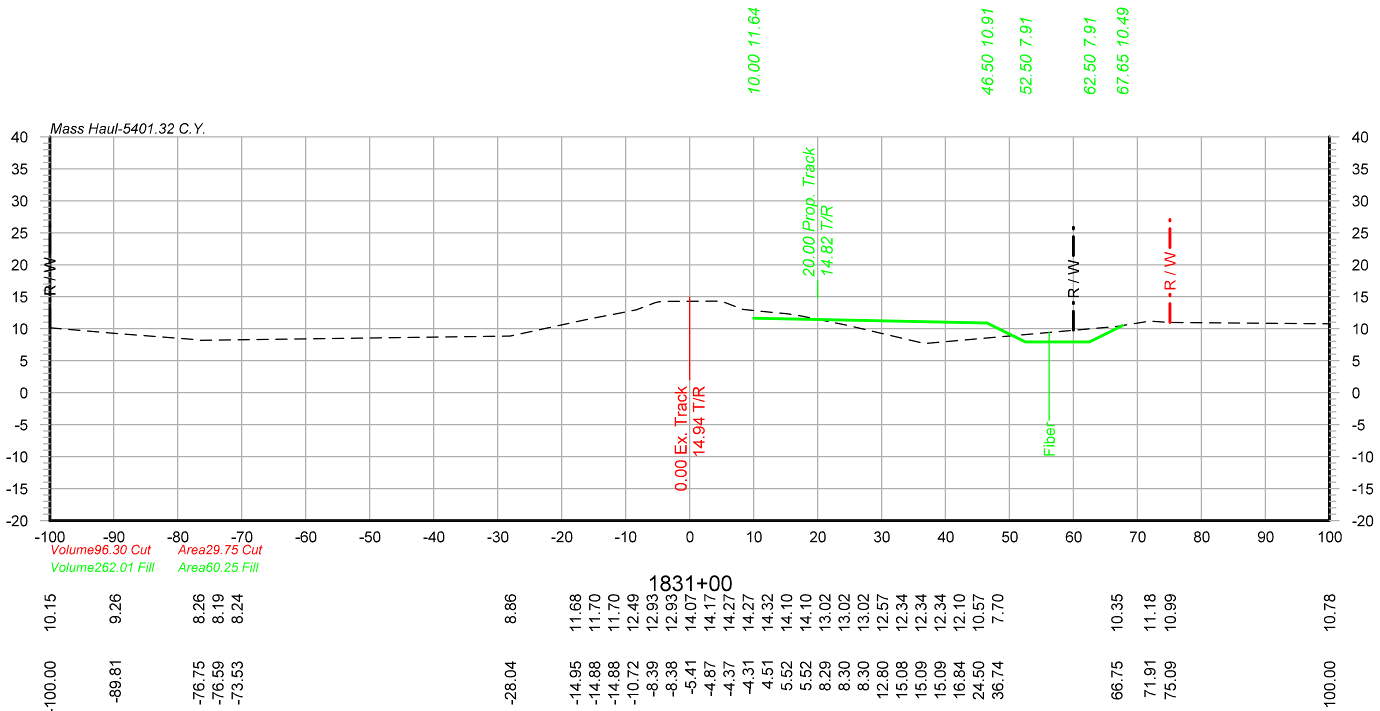

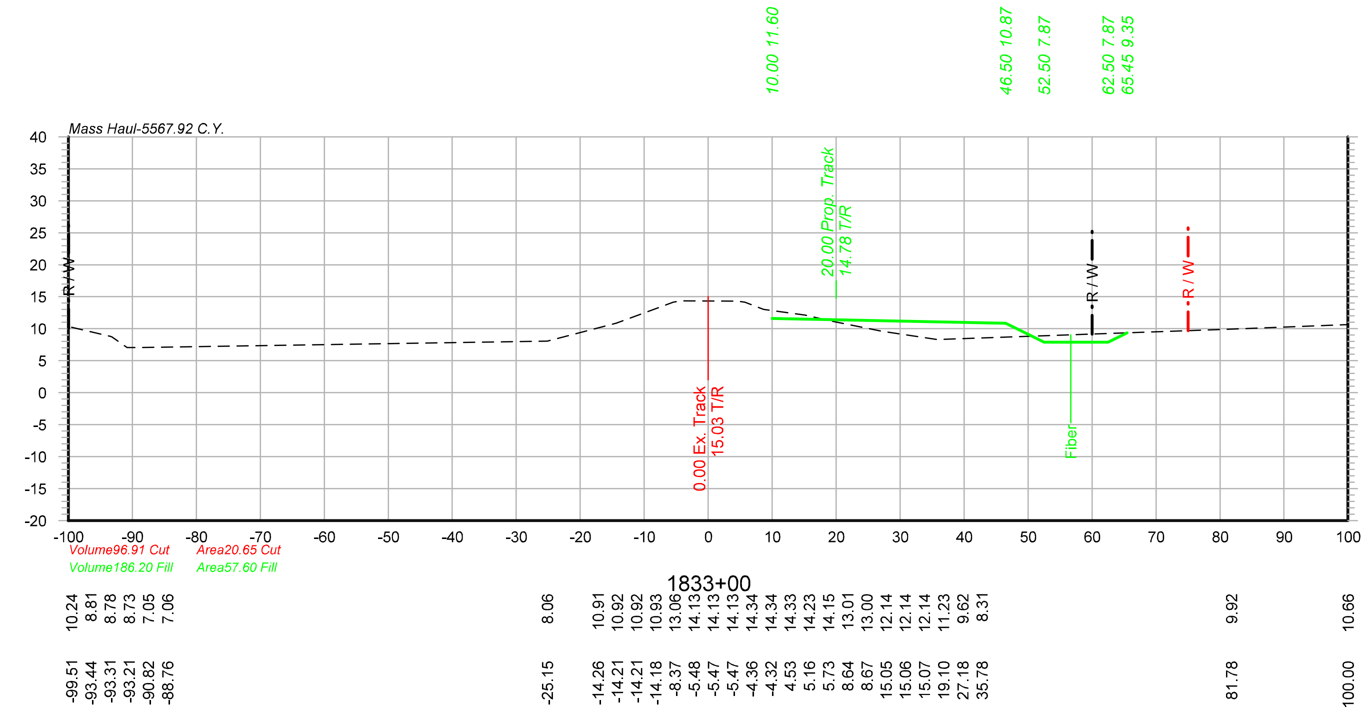

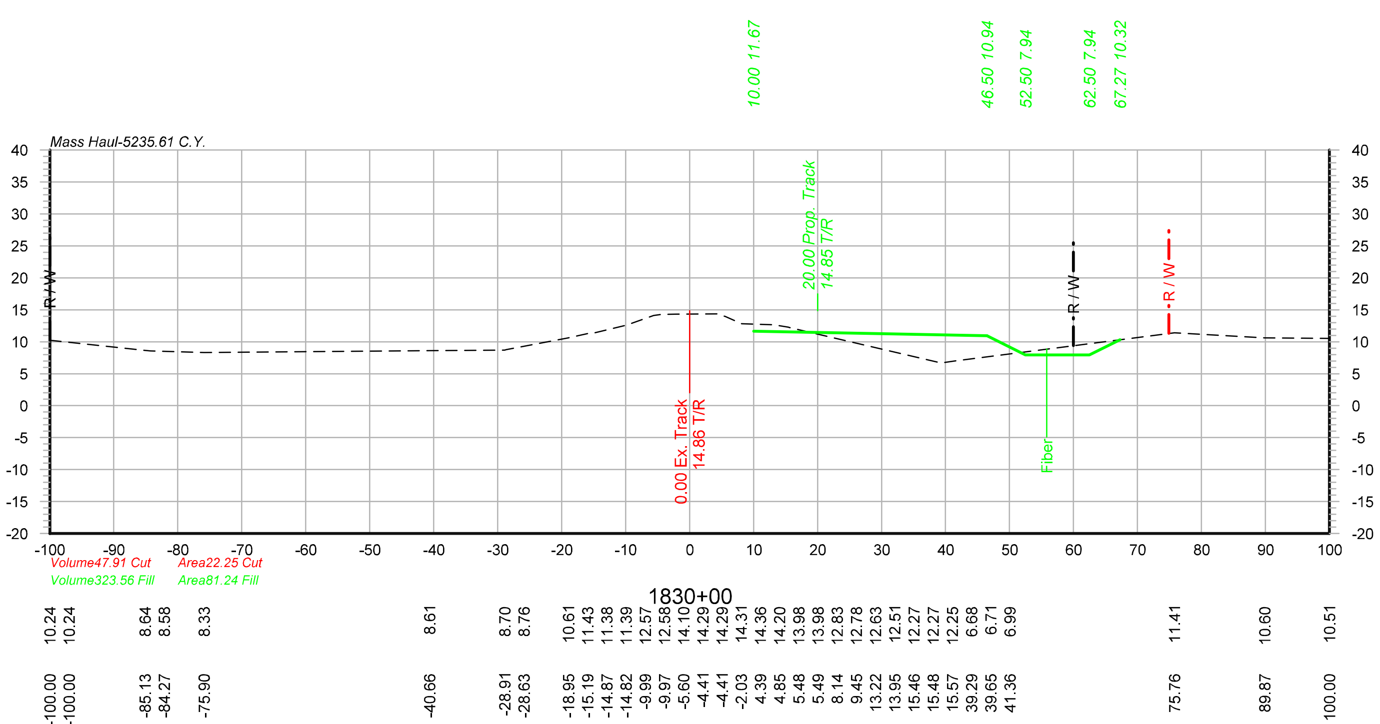

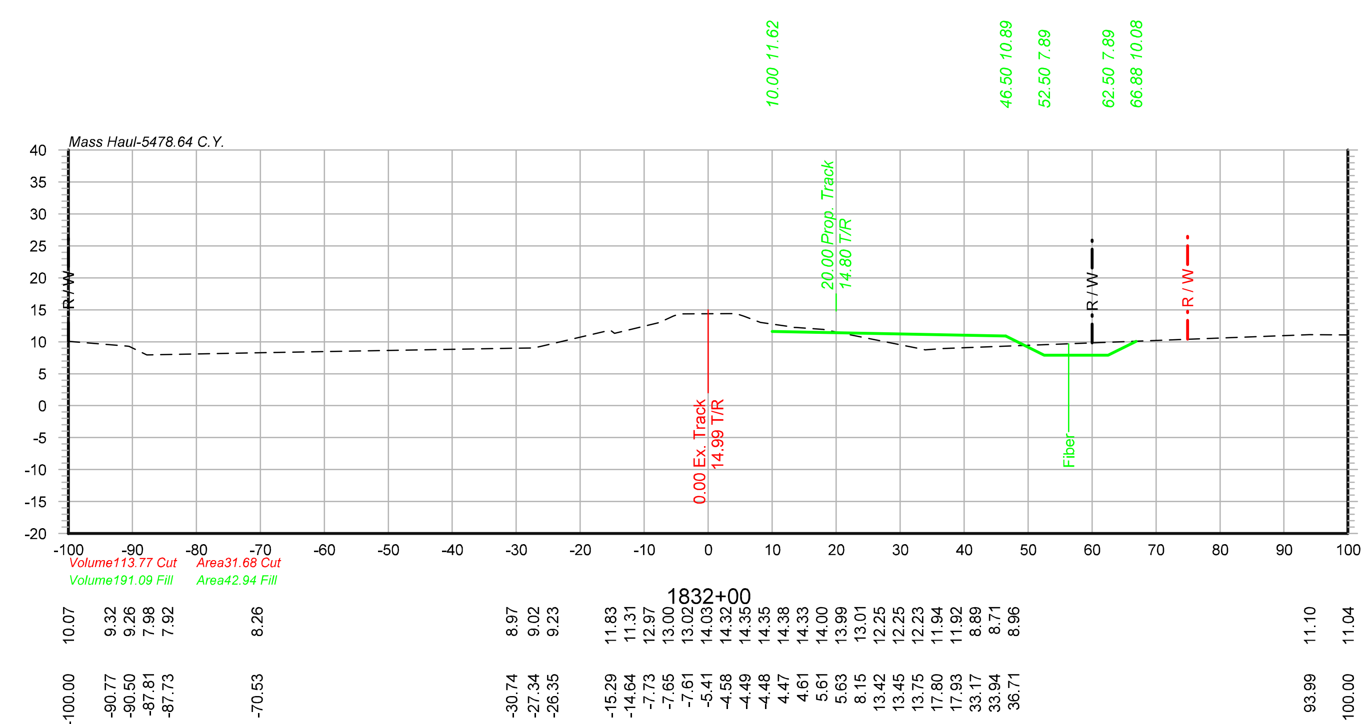

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SHEET NUMBER X013 of 027

UNION PACIFIC RAILROAD
Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1830+00 TO STA.1833+00

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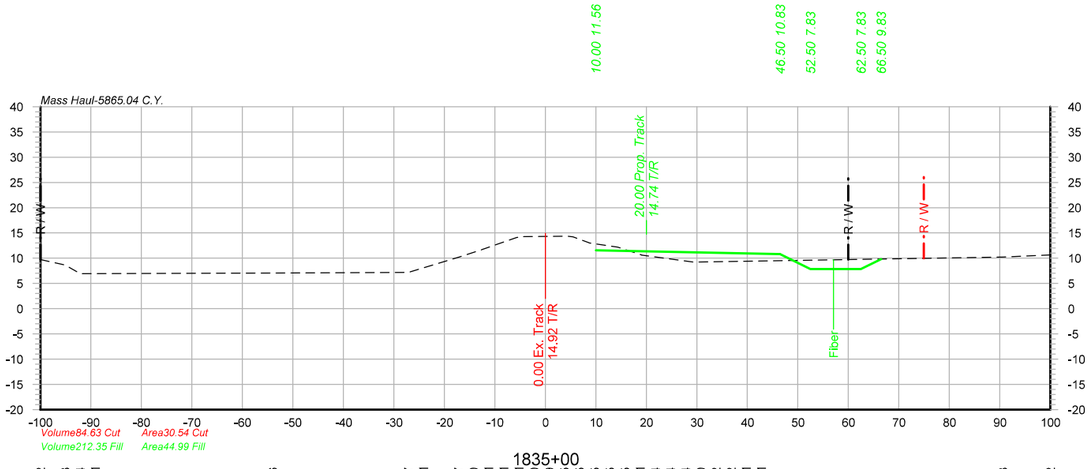
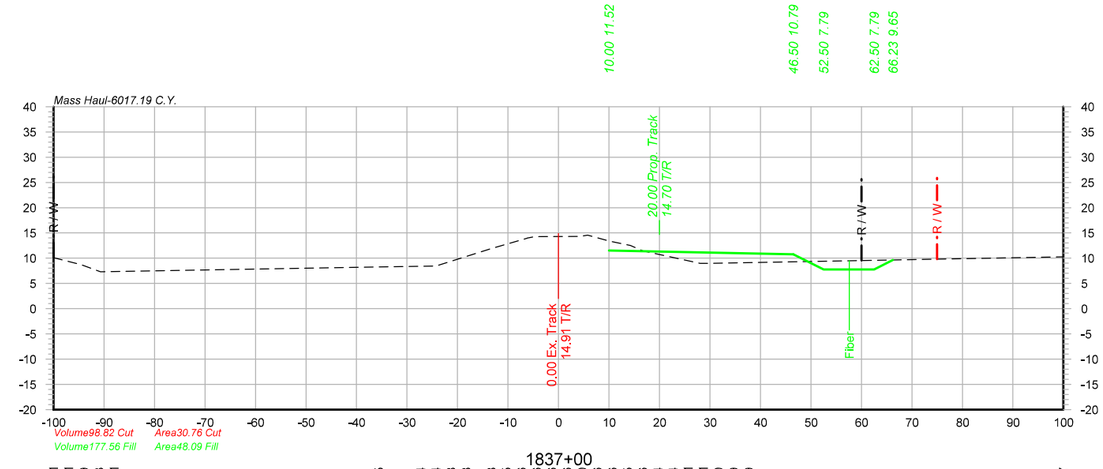


1835+00

9.72	-100.00
8.63	-95.11
6.94	-92.12
6.91	-92.07
7.06	-53.97
7.17	-27.12
7.21	-27.01
10.17	-17.21
11.70	-12.59
11.81	-12.27
11.81	-12.27
11.81	-12.28
12.60	-9.99
14.09	-5.66
14.25	-4.52
14.25	-4.51
14.25	-4.49
14.35	4.38
14.35	4.38
14.21	5.45
13.04	8.66
13.04	8.67
13.04	8.69
12.20	14.35
10.62	19.06
10.62	19.07
10.61	19.13
9.21	29.37
10.23	90.61
10.62	100.00



1837+00

10.11	-100.00
10.11	-99.98
8.69	-94.42
8.63	-94.32
7.31	-90.71
8.25	-35.58
8.44	-24.87
8.44	-24.31
8.48	-24.20
8.48	-24.19
11.88	-13.32
13.95	-6.26
13.96	-6.22
14.26	-4.68
14.26	-4.68
14.26	-4.62
14.30	4.32
14.56	5.76
14.56	5.77
14.55	5.79
13.46	9.77
13.44	9.83
12.54	14.23
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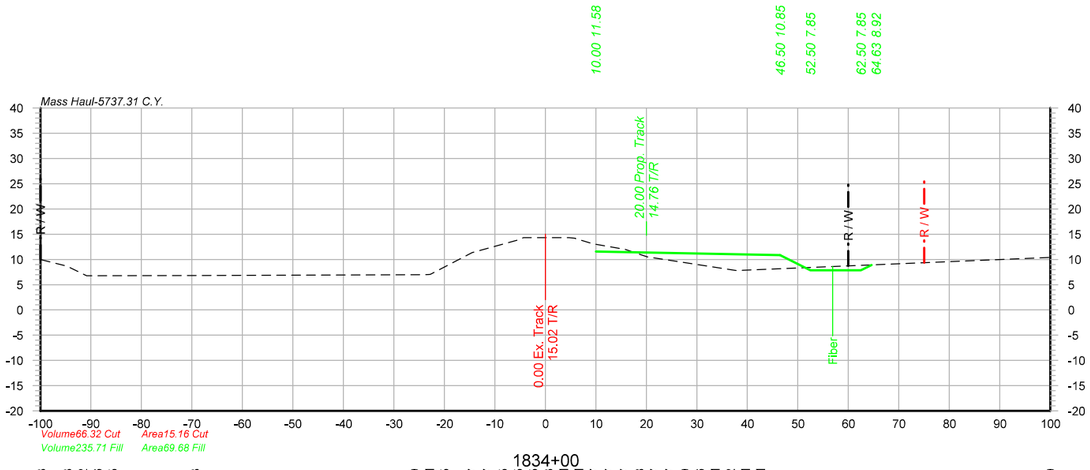
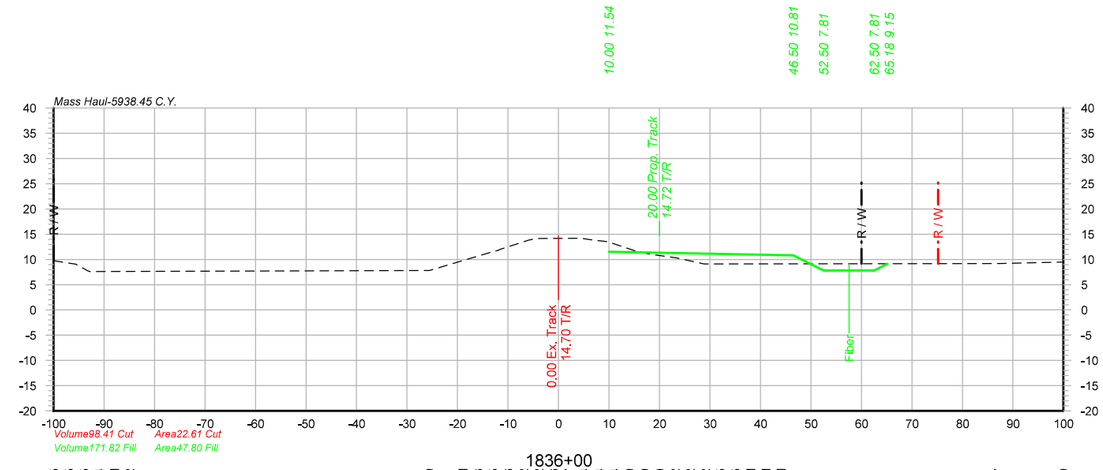
11.41	16.88
11.40	16.95
8.99	28.04
8.99	29.79
10.27	100.00



1834+00

9.93	-99.82
8.63	-94.65
8.62	-94.59
6.76	-90.87
6.75	-90.85
6.83	-69.39
6.99	-23.96
7.01	-22.94
7.05	-22.77
11.37	-14.50
11.37	-14.49
13.85	-5.39
13.85	-5.38
14.05	-4.94
14.33	-4.33
14.31	4.66
14.31	4.67
14.17	5.92
14.17	5.92
14.17	5.92
13.98	6.51
13.17	9.11
13.17	9.12
11.99	15.84
11.66	16.81
10.51	20.13
7.82	37.73
7.81	37.79
7.81	38.13
10.39	100.00



1836+00

9.75	-99.93
9.05	-95.57
9.05	-95.54
9.04	-95.52
7.61	-92.97
7.62	-92.47
7.80	-25.54
11.51	-13.03
11.53	-13.00
11.55	-12.93
11.56	-12.87
11.82	-11.89
11.92	-11.86
13.86	-5.78
13.87	-5.72
14.14	-4.31
14.14	-4.31
14.14	-4.31
14.20	4.54
14.20	4.54
13.89	6.36
13.52	9.69
13.52	9.69
13.52	9.70
11.65	15.35
11.65	15.36
11.01	18.19
10.31	23.35
9.11	28.85
9.17	87.09
9.50	100.00

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CHECKED BY: MJK	LOCATION & DESCRIPTION: CONSTRUCT CALCASIEU RUN-THROUGH SLOT LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)
DATE: 09/06/13	
SHEET NUMBER X014 of 027	SHEET TITLE: CROSS SECTIONS STA.1834+00 TO STA.1837+00

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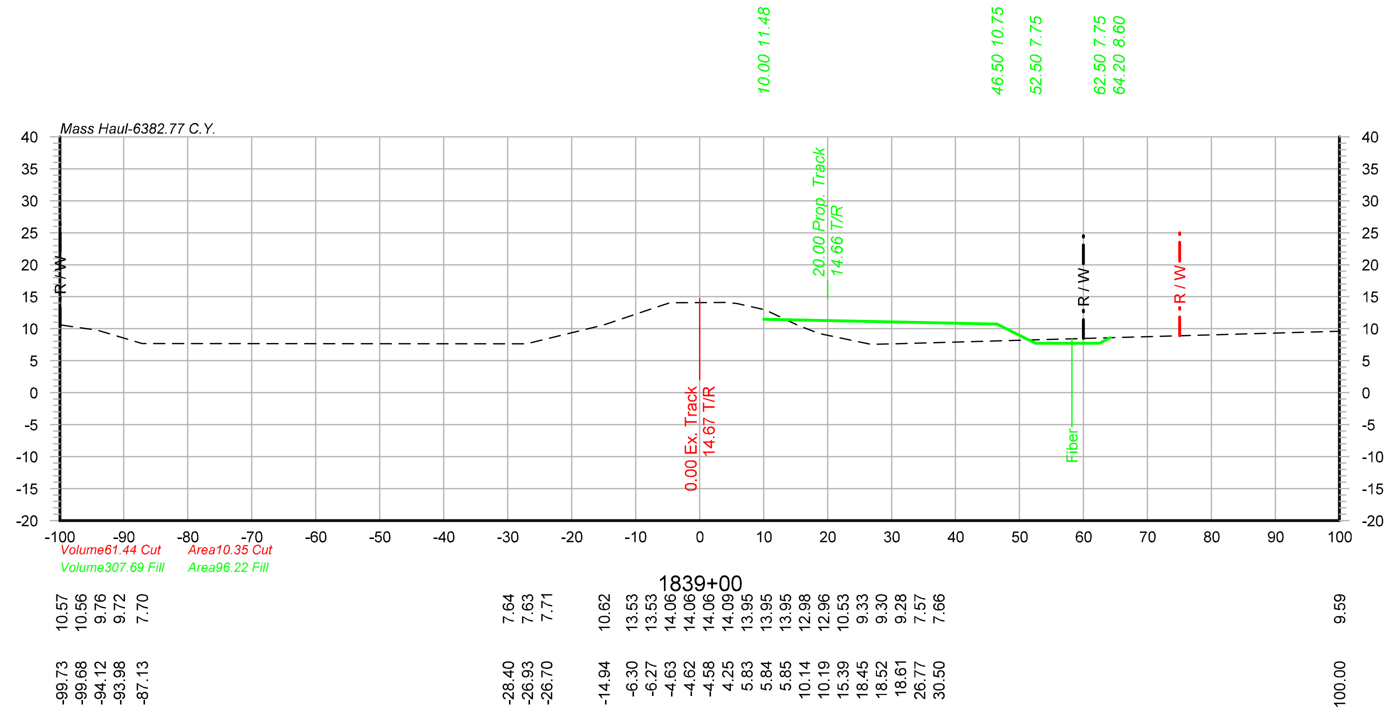

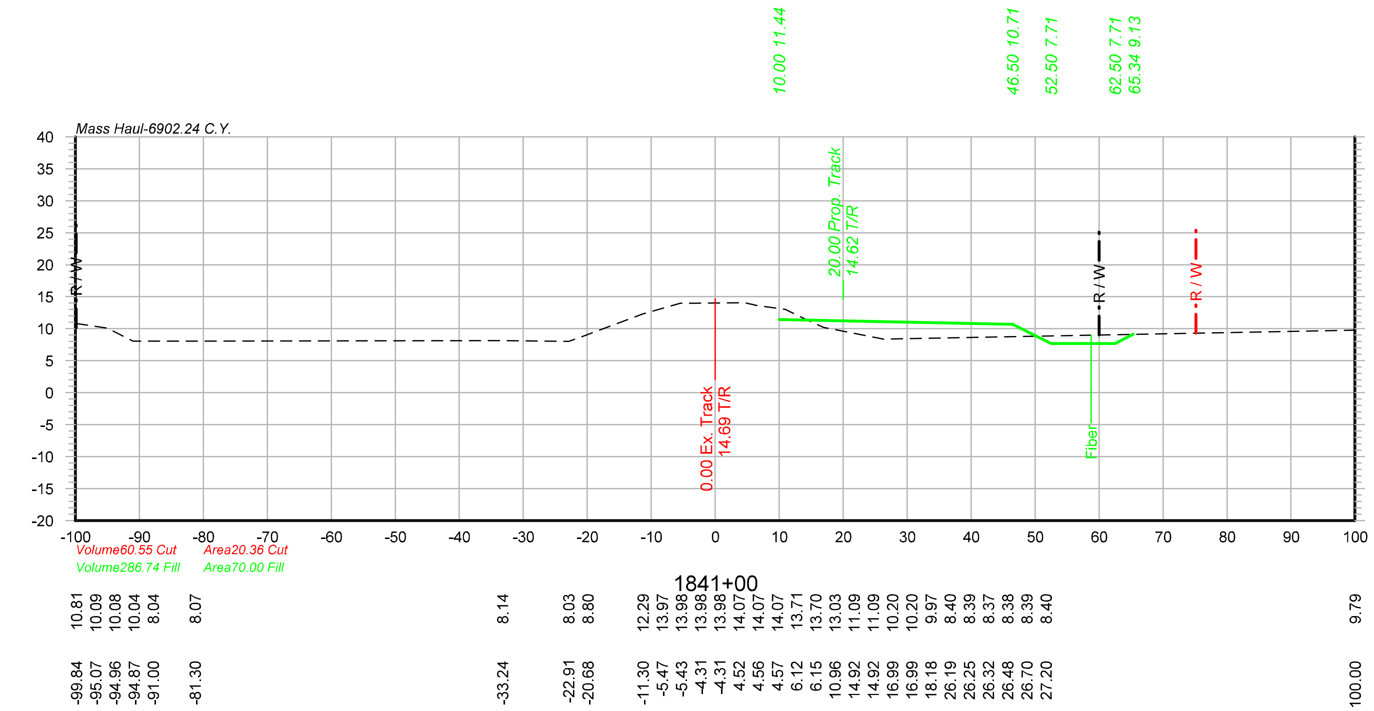

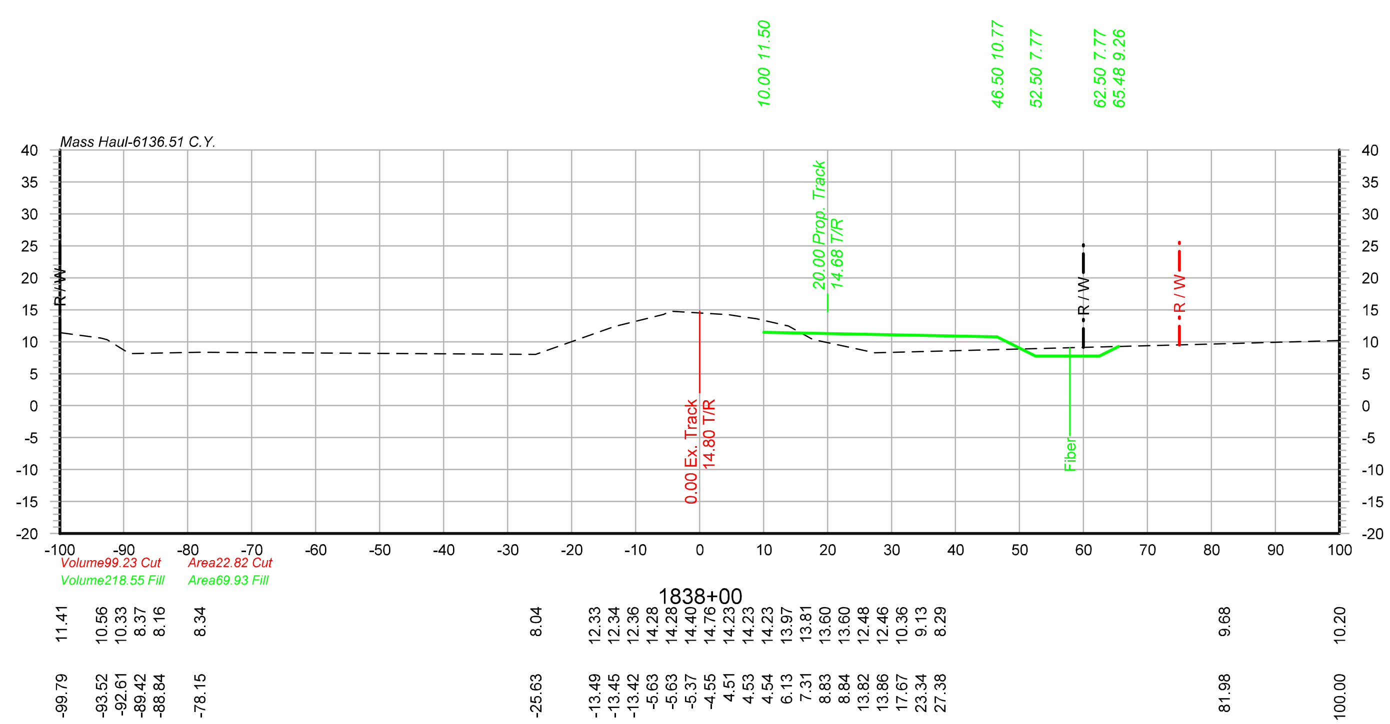

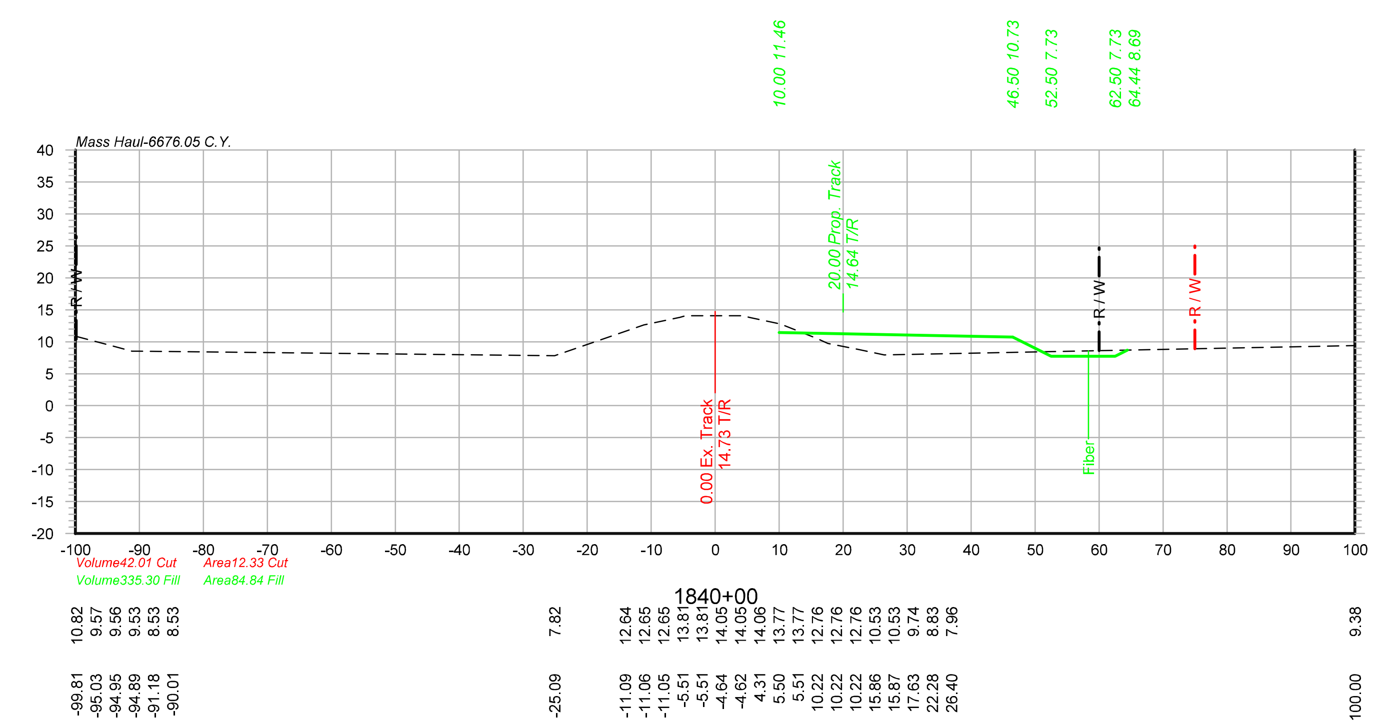

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DATE: 09/06/13
SHEET NUMBER X015 of 027

UNION PACIFIC RAILROAD
Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1838+00 TO STA.1841+00

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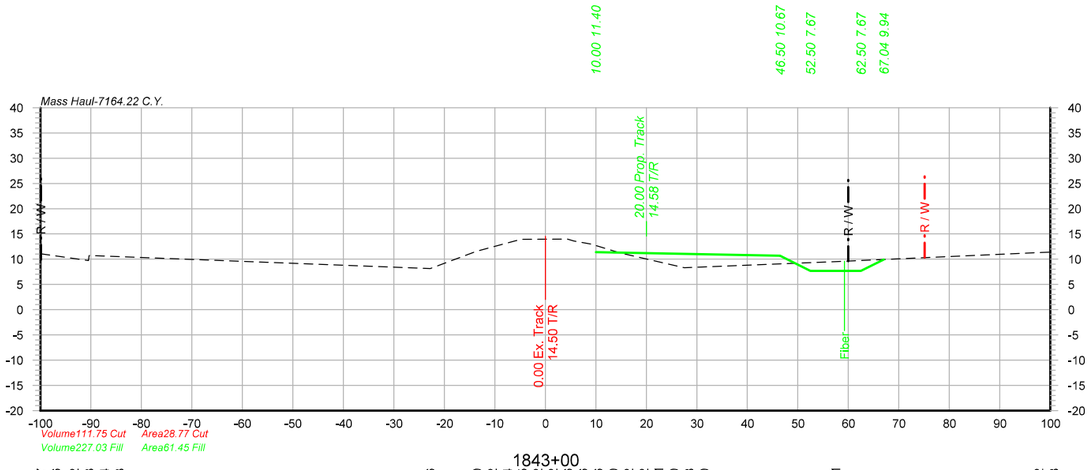

1843+00

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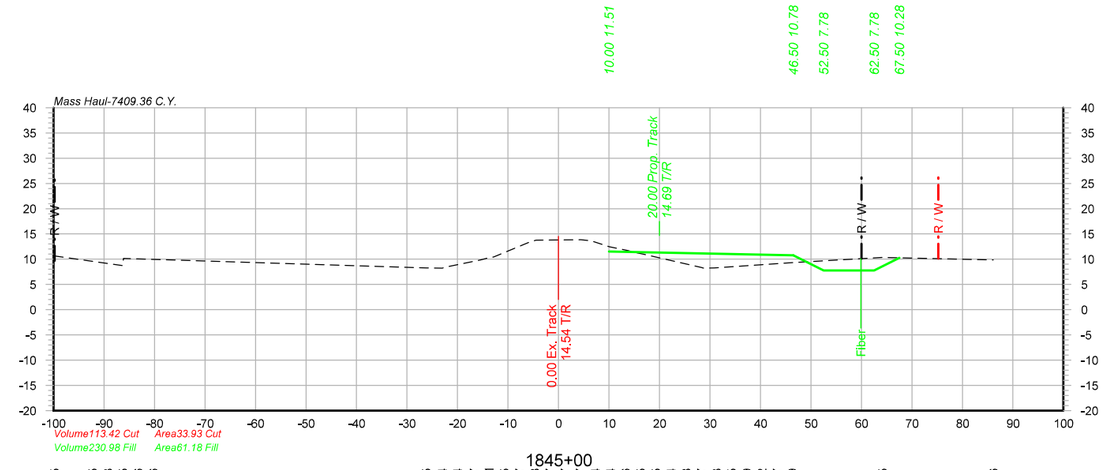
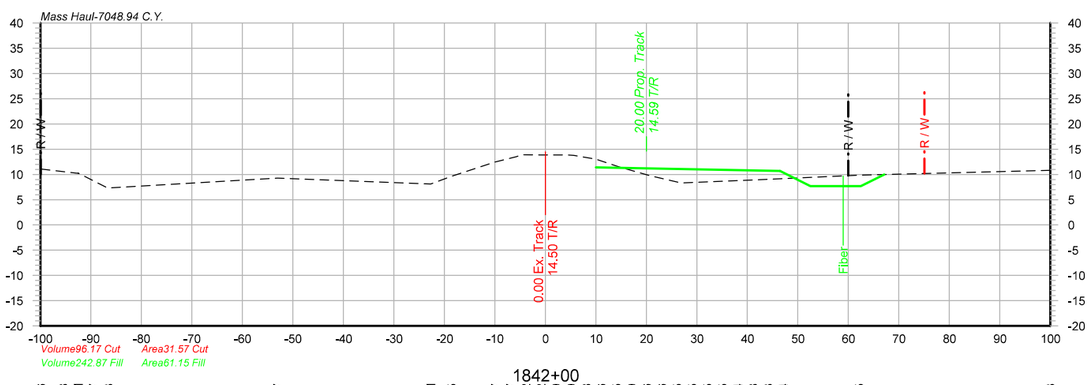
11.06	-99.84
9.72	-90.46
10.73	-90.35
10.74	-90.35
10.73	-90.13
8.16	-22.80
11.60	-13.53
11.62	-13.48
13.64	-5.92
13.654	-5.90
13.92	-4.62
13.92	-4.61
13.96	4.35
13.96	4.39
13.96	4.39
13.60	5.64
12.92	9.36
12.92	9.38
12.91	9.40
11.20	14.99
11.18	15.07
8.30	27.52
9.51	57.52
11.32	97.70
11.38	100.00



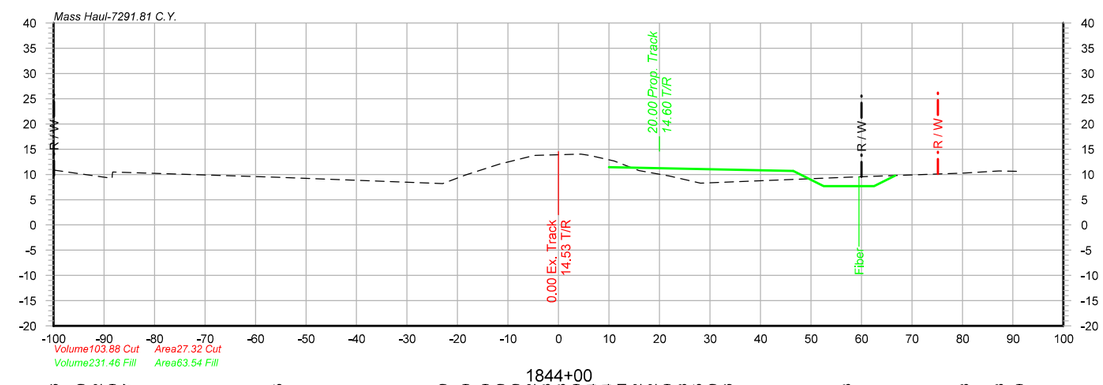
1845+00

10.65	-99.81
9.15	-89.22
8.73	-86.29
9.05	-86.25
10.16	-86.14
10.16	-85.98
8.25	-26.20
8.24	-23.00
8.44	-22.35
9.87	-15.41
10.31	-13.72
10.45	-12.83
13.47	-5.51
13.48	-5.46
13.77	-4.44
13.77	-4.43
13.77	-4.37
13.84	4.42
13.84	4.43
13.66	6.43
13.65	6.46
12.45	10.18
12.44	10.22
11.68	13.86
11.47	14.47
11.03	16.71
8.35	28.35
8.29	28.58
8.22	28.79
8.27	30.83
9.29	46.18
10.35	64.18
9.86	86.12



1842+00

11.06	-99.86
10.28	-93.02
10.21	-92.51
10.27	-92.51
7.33	-86.68
9.27	-53.06
8.11	-22.69
9.65	-18.54
12.47	-9.89
12.47	-9.88
13.52	-5.72
13.52	-5.71
13.89	-4.69
13.89	-4.69
13.88	-0.86
13.86	4.19
13.85	4.39
13.79	5.64
12.96	10.24
12.96	10.26
12.95	10.27
11.45	14.75
11.45	14.75
11.45	14.76
11.44	14.79
9.78	20.62
8.33	26.88
8.94	41.96
9.85	62.15
10.83	100.00



1844+00

10.86	-99.91
10.10	-94.58
9.22	-88.42
9.89	-88.35
10.47	-88.29
9.45	-55.61
8.20	-22.92
9.89	-18.39
12.09	-11.53
12.10	-11.49
12.10	-11.47
12.12	-11.43
13.53	-5.75
13.53	-5.74
13.79	-4.58
14.04	4.41
14.04	4.43
13.81	5.81
13.72	6.33
13.72	6.33
12.69	10.92
12.68	10.95
10.75	15.90
9.70	21.96
8.26	28.15
9.43	56.99
10.28	80.32
10.68	87.22
10.59	91.28

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UNION PACIFIC RAILROAD

Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1842+00 TO STA.1845+00

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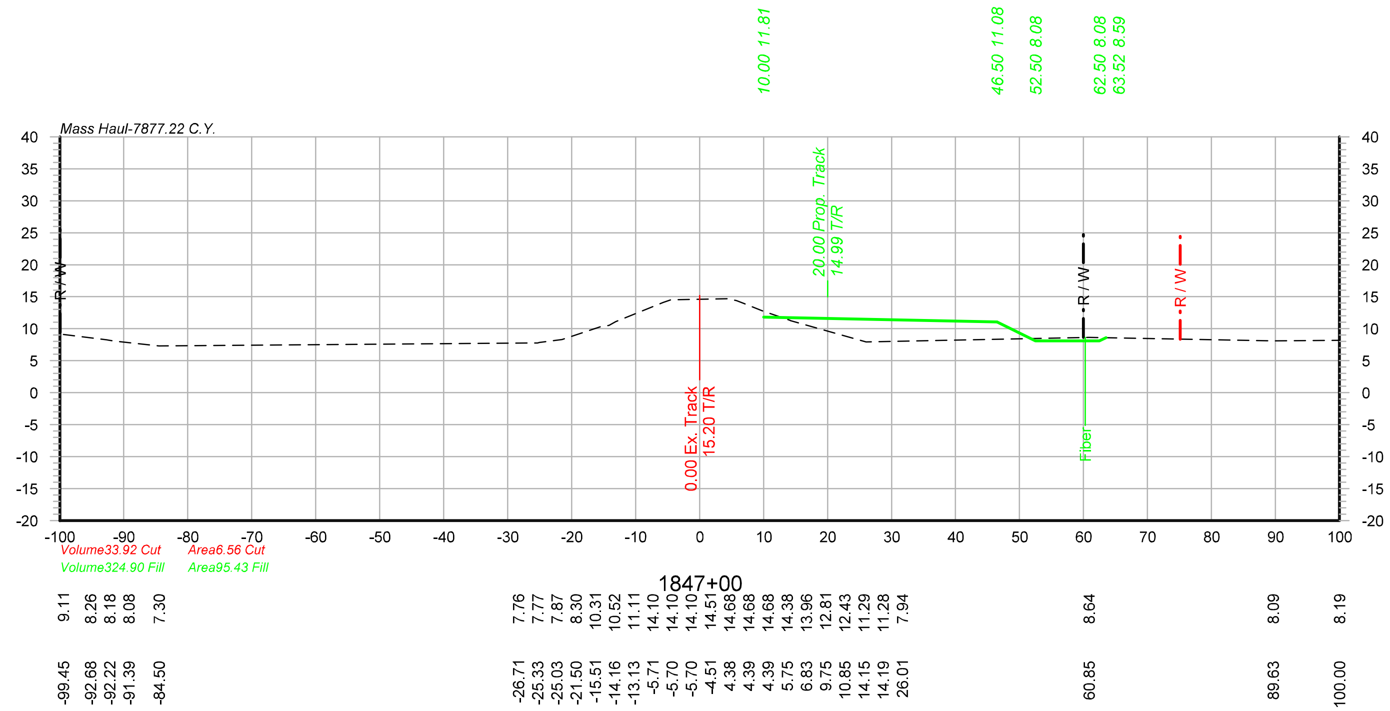

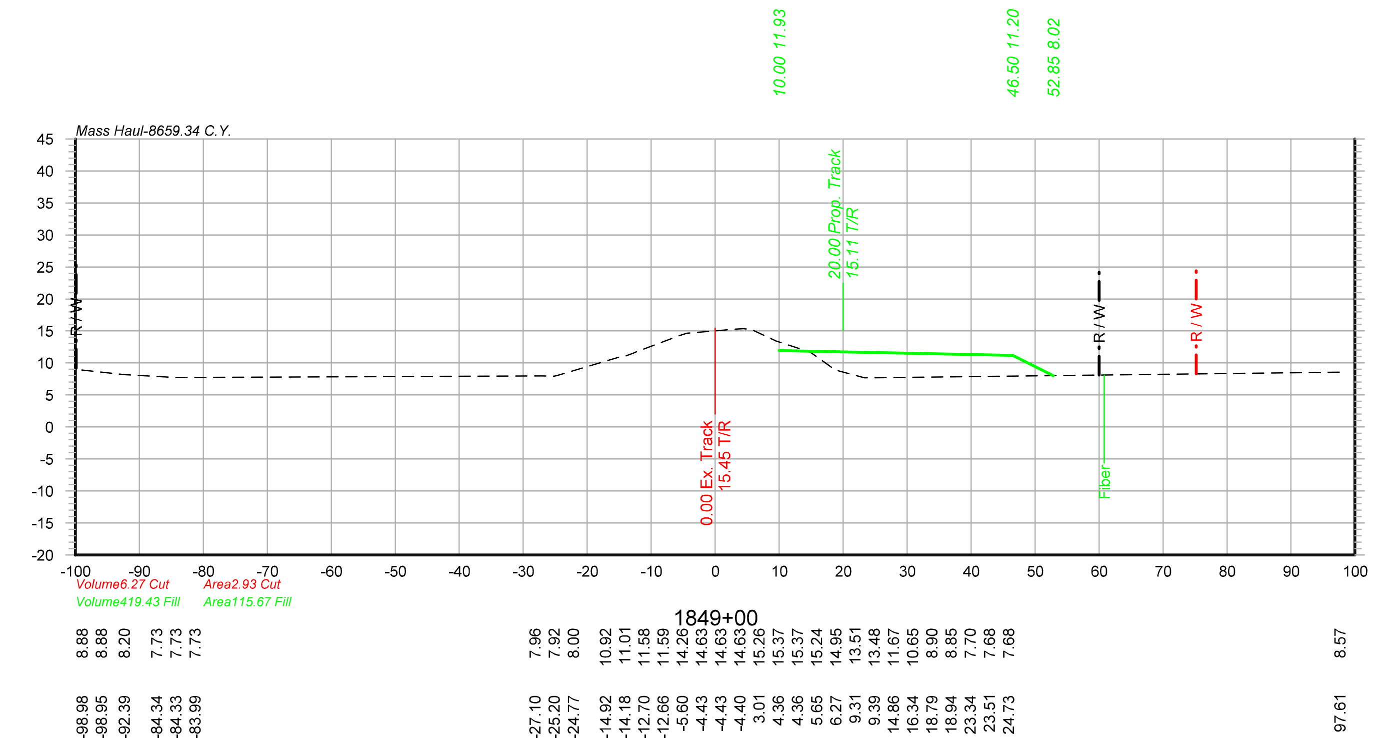

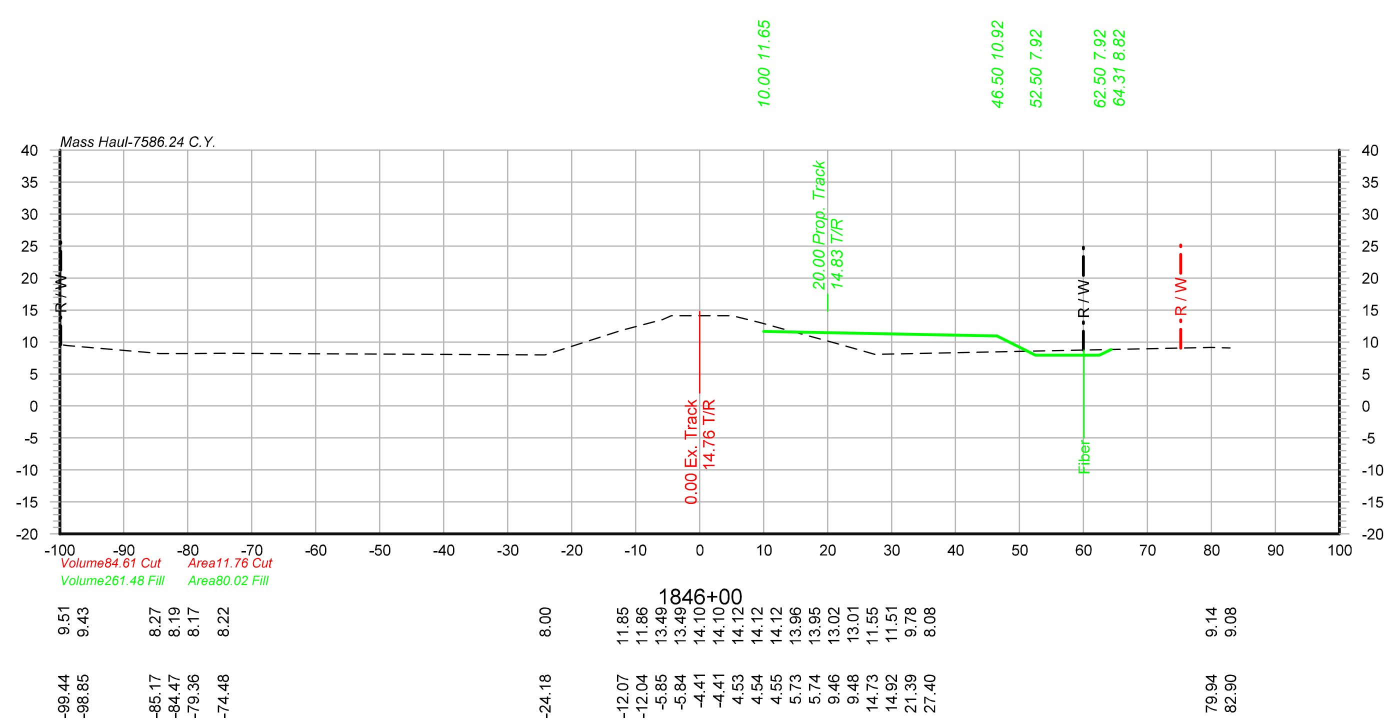

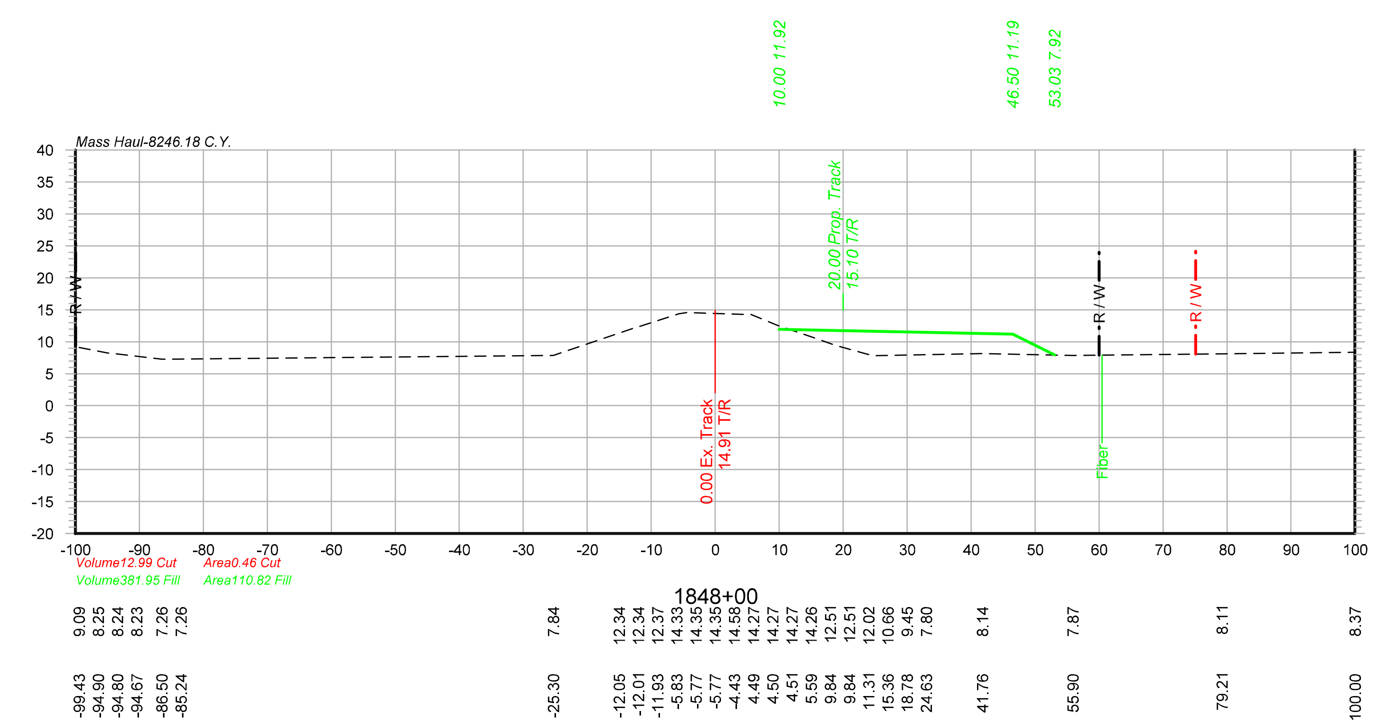

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LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1846+00 TO STA.1849+00

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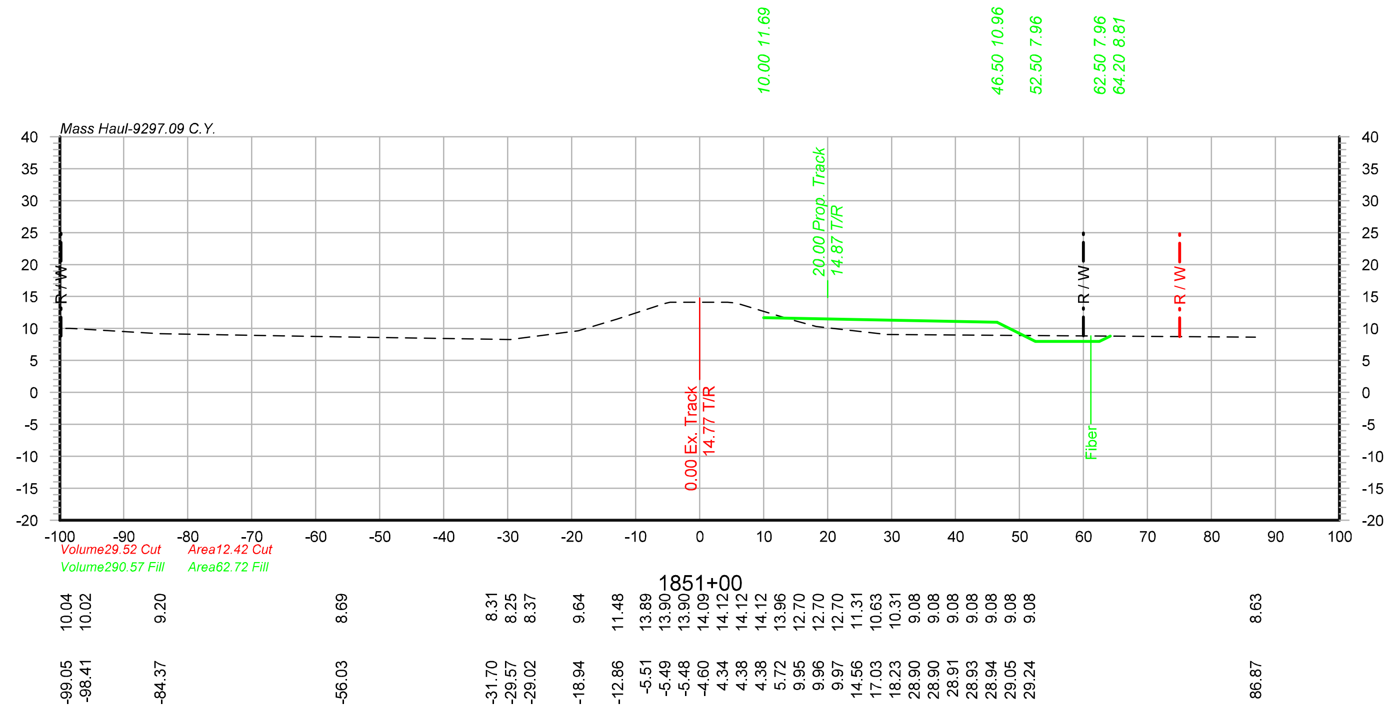

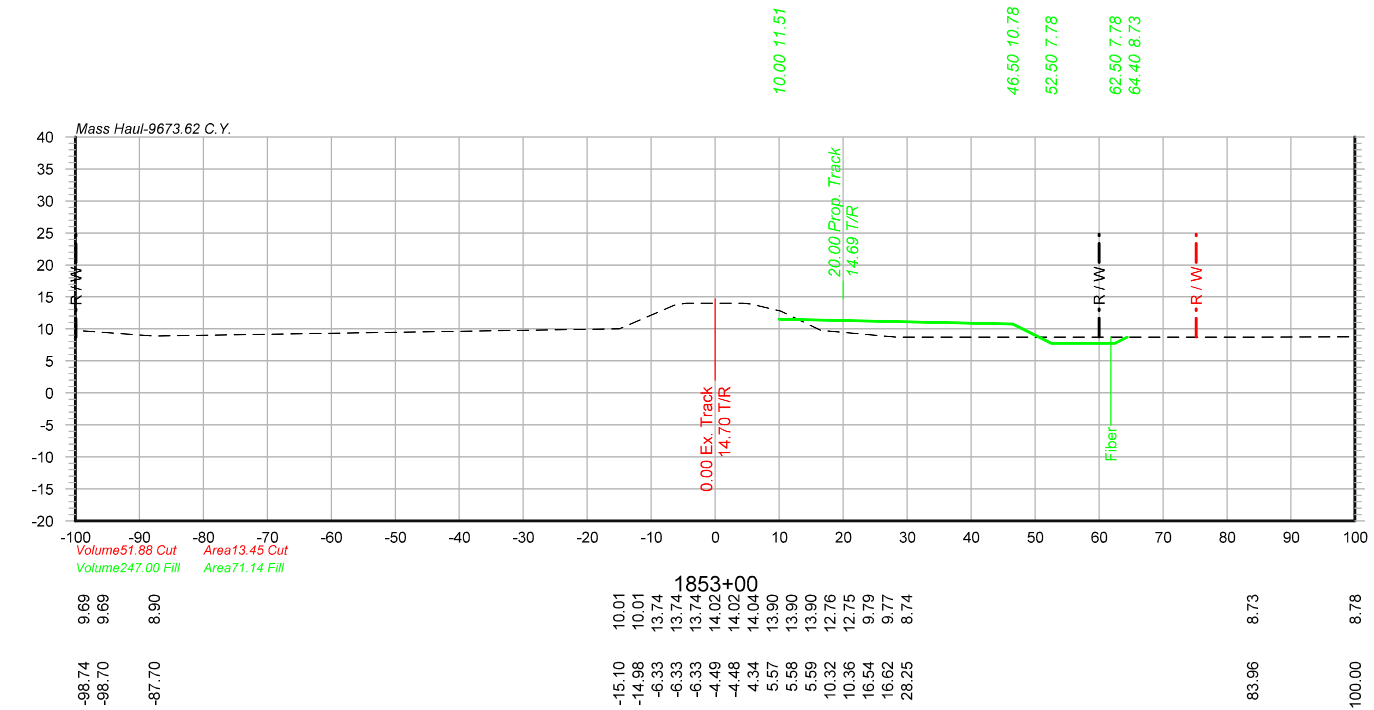

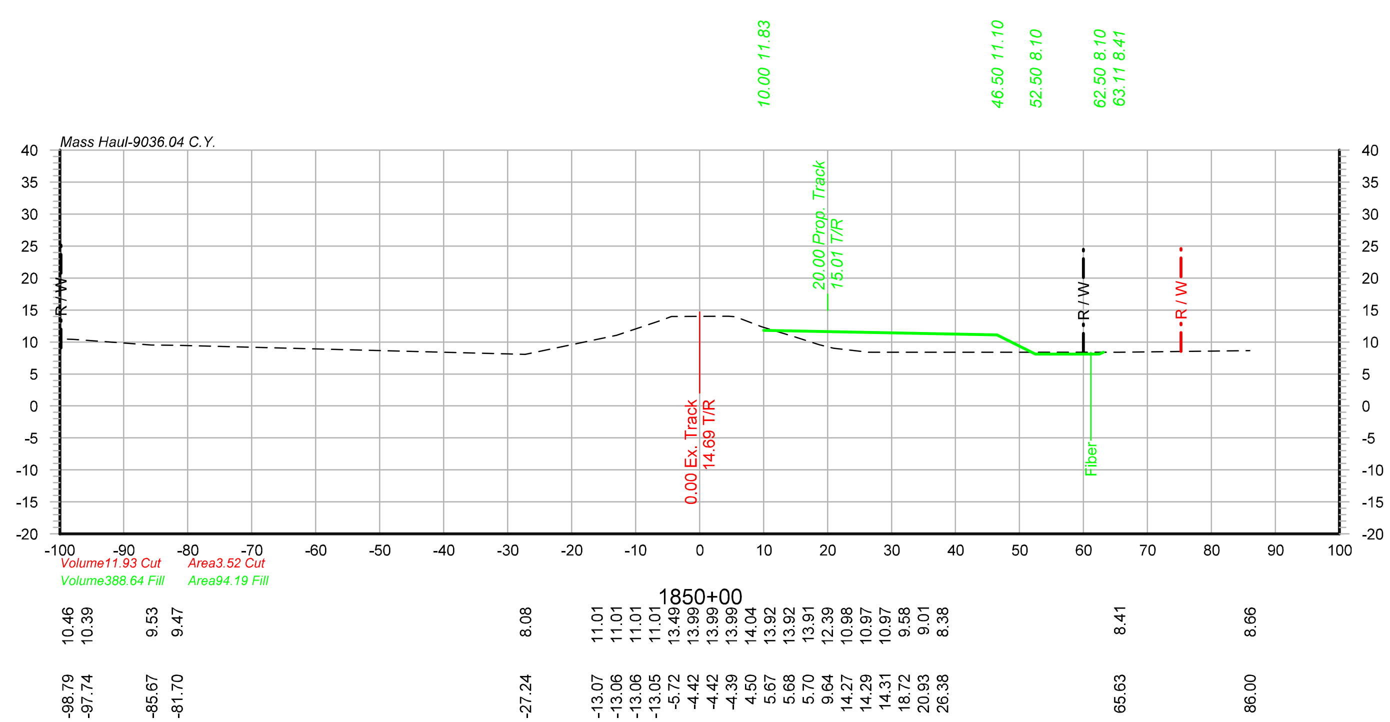

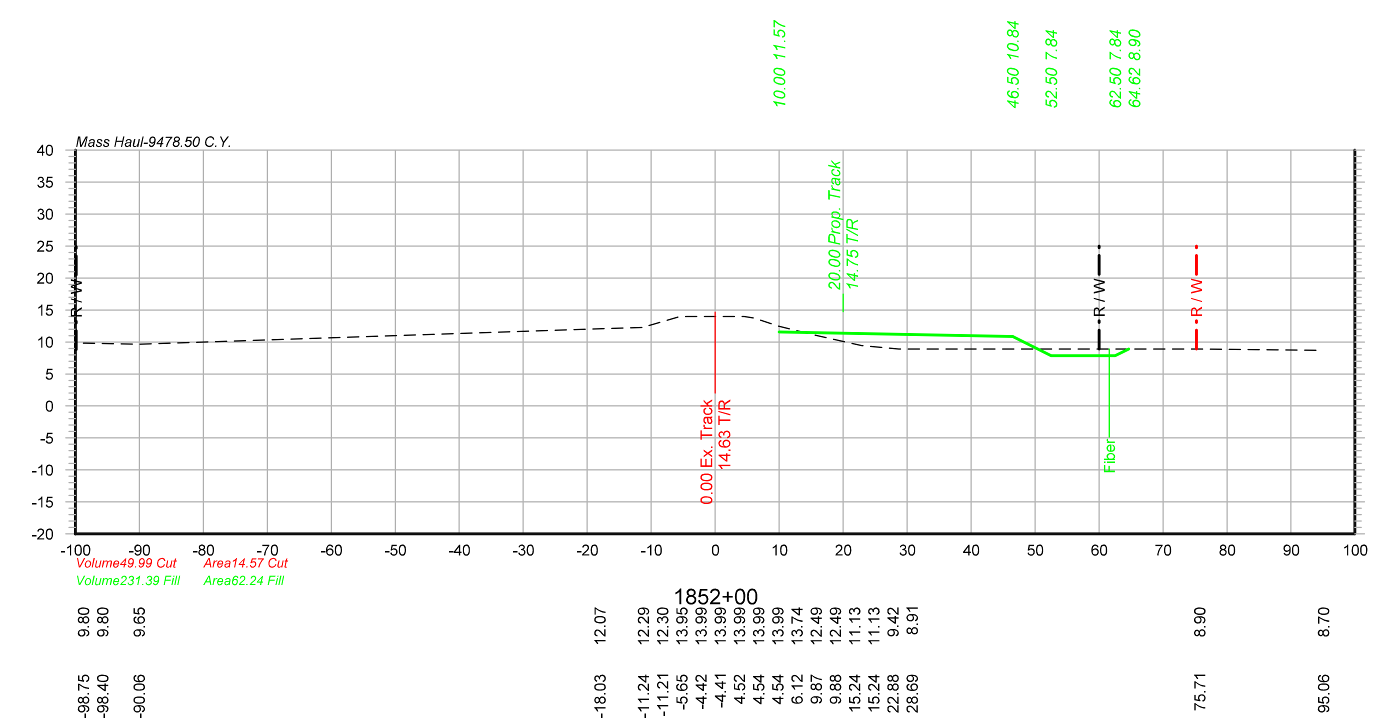

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LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1850+00 TO STA.1853+00

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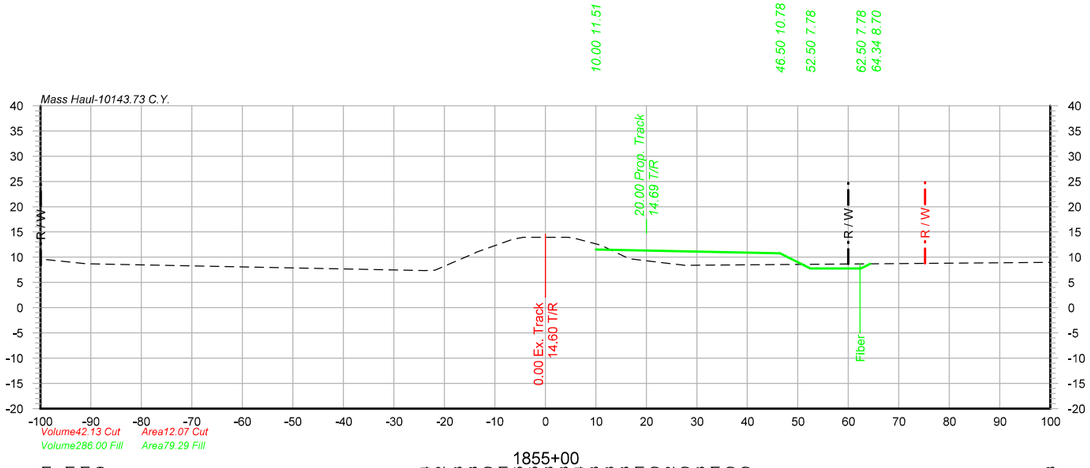
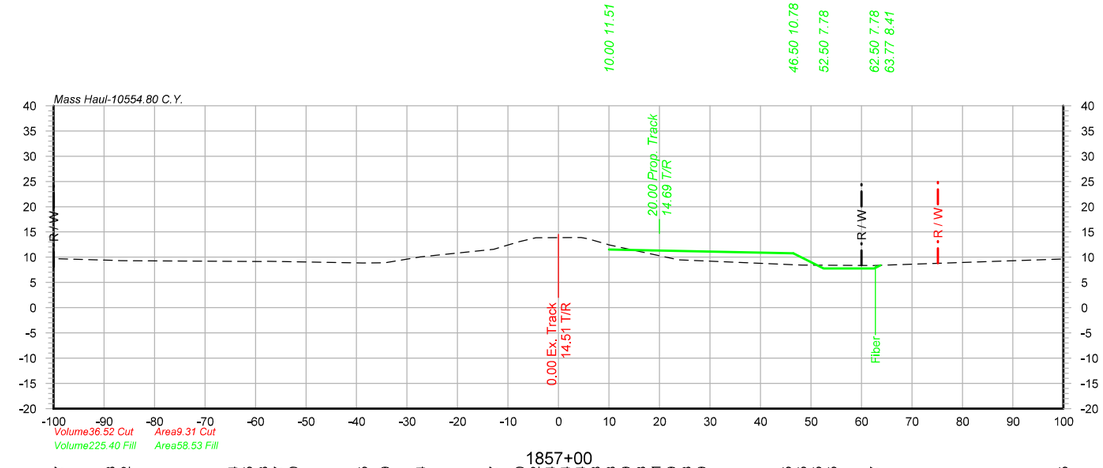


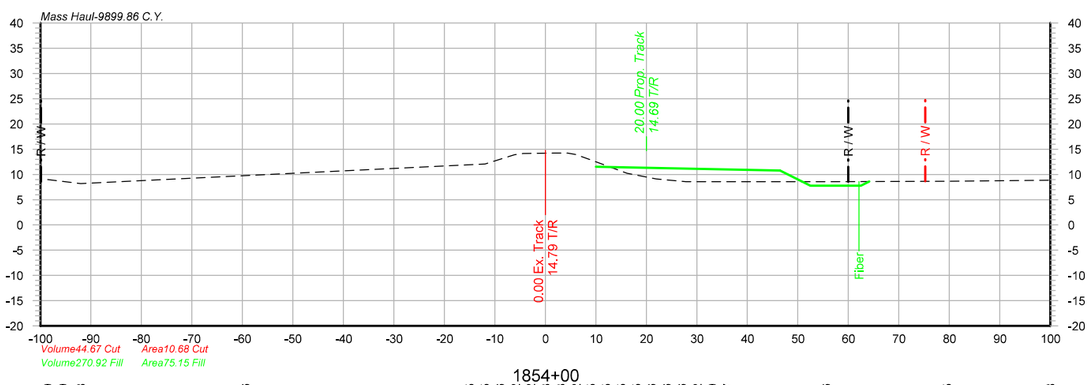
1855+00

9.51	8.71	8.69
-98.83	-91.17	-91.16	-90.13
7.34	7.42	10.53	10.58	11.00	11.01	13.55	13.55	13.93	13.93	13.94	13.73	13.73	13.73	12.41	12.40	9.82	9.70	8.83	8.41	8.40	8.40	8.98
-23.86	-21.84	-14.68	-14.38	-13.60	-13.58	-6.39	-6.39	-4.43	-4.38	4.58	5.83	5.84	5.85	10.95	10.98	16.33	16.70	24.02	27.30	27.45	28.12	100.00



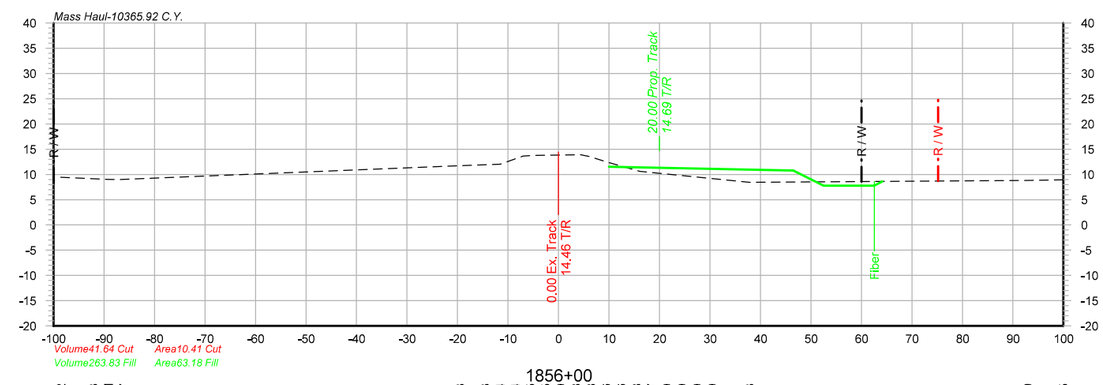
1857+00

9.67	9.38	9.32
-98.95	-88.76	-88.73
9.14	9.15	9.13	9.17	9.20
-59.12	-58.81	-58.51	-58.25	-57.47
8.85	8.89	10.04
-38.72	-34.35	-27.33
11.57	13.10	13.12	13.84	13.84	13.84	13.88	13.88	13.59	13.58	12.51	12.49	11.28	9.49
-12.84	-7.68	-7.63	-4.46	-4.45	-4.39	4.48	4.49	6.10	6.13	9.78	9.84	15.43	23.81
8.45	8.45	8.45	8.45
48.22	48.23	48.24	48.28
8.37
62.53
9.65
100.00



1854+00

8.99	8.99	8.18
-98.57	-98.50	-92.02
9.76
-59.38
12.05	12.05	12.06	13.92	13.92	14.13	14.13	14.22	14.25	13.95	13.95	13.95	12.86	12.86	12.86	10.22	9.09	8.57
-11.96	-11.95	-11.94	-6.13	-6.12	-4.43	-4.42	1.86	4.41	6.06	6.06	6.07	9.04	9.04	9.05	16.19	21.97	27.83
8.56
55.59
8.65
79.57
8.88
100.00



1856+00

9.42	9.03	9.01	8.97
-98.57	-89.35	-89.12	-87.21
11.73	12.03	12.04	12.04	13.65	13.65	13.79	13.88	13.56	13.56	12.38	12.37	10.59	10.59	10.59	10.59
-19.51	-11.66	-11.57	-11.55	-6.95	-6.93	-4.49	4.37	4.42	6.06	6.07	9.92	9.94	16.13	16.14	16.14	16.16
8.43
37.84
8.80
92.94
8.95
100.00

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LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1854+00 TO STA.1857+00

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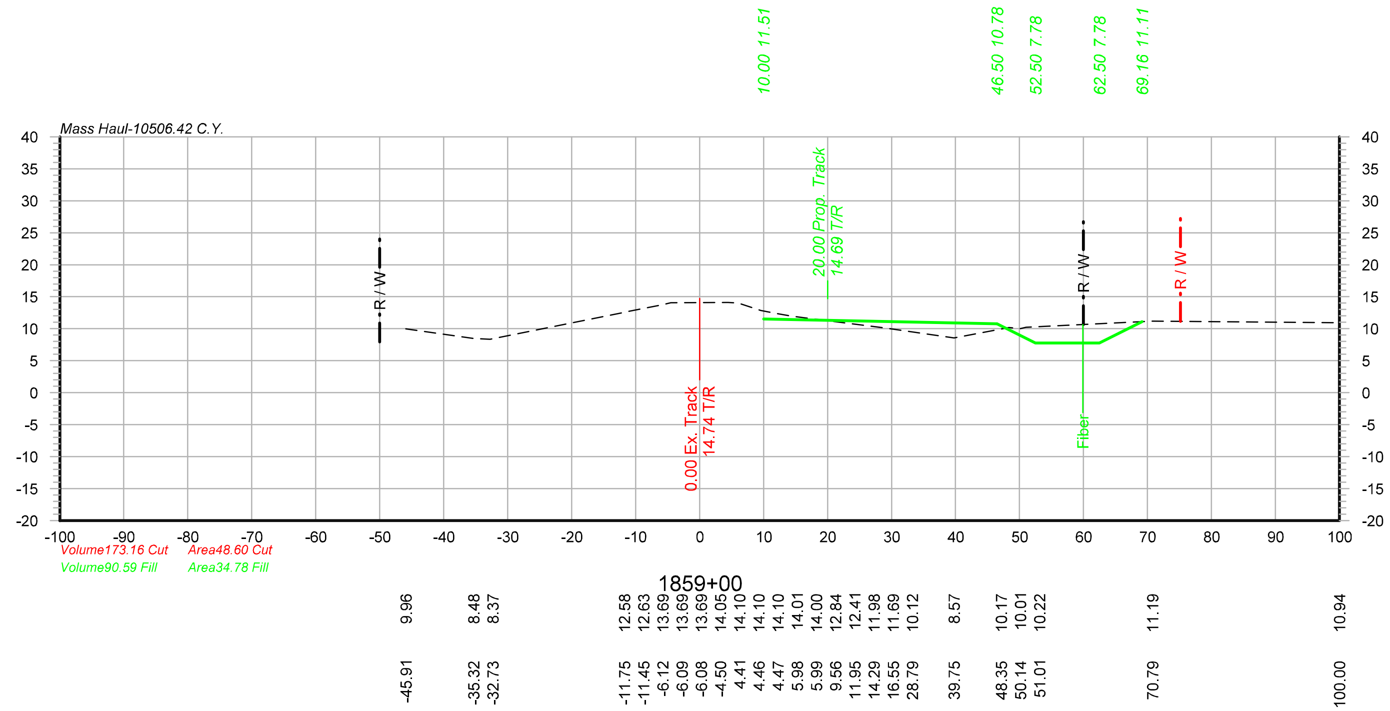

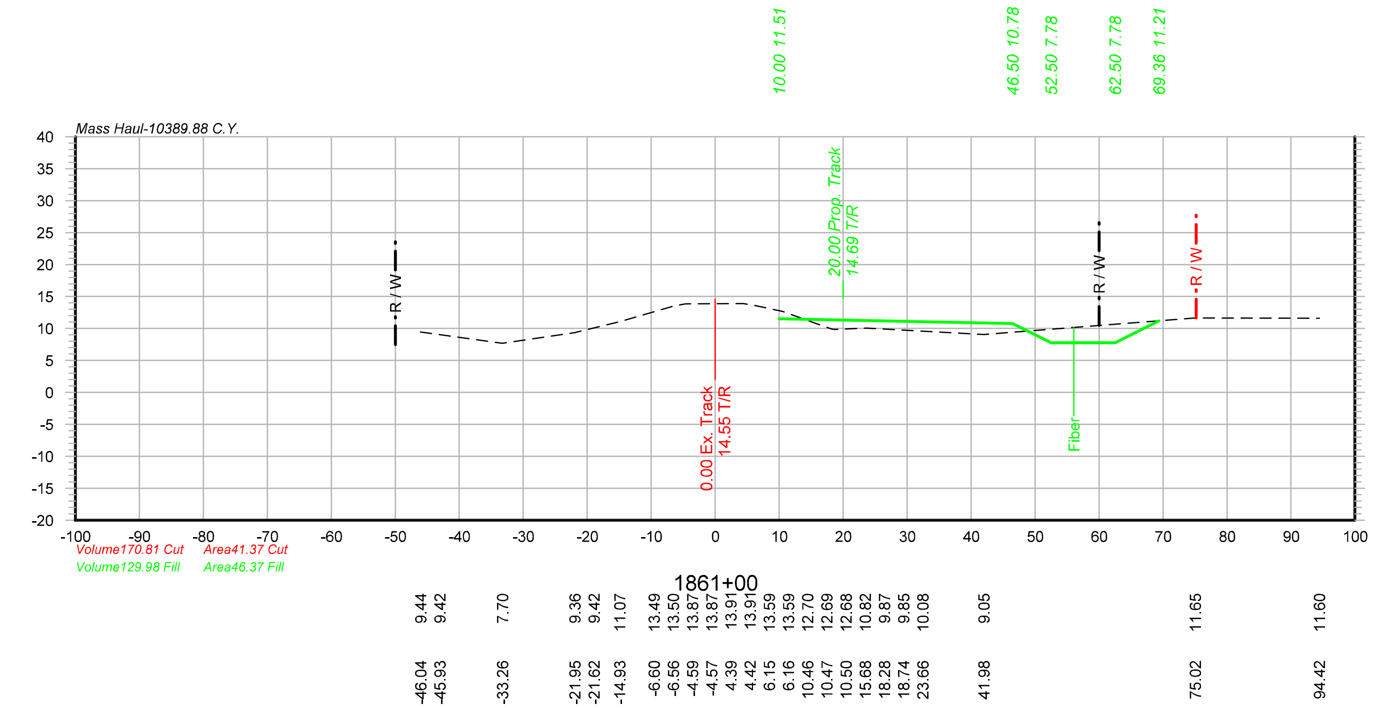

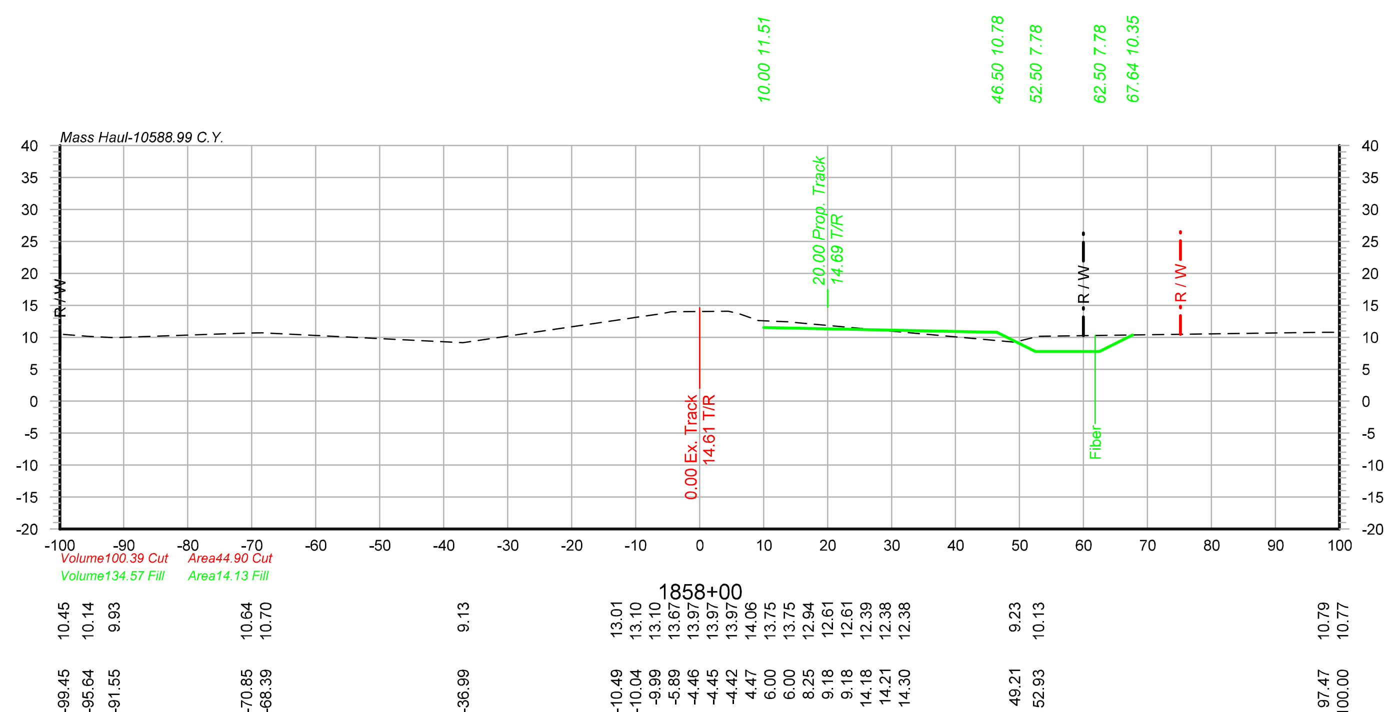

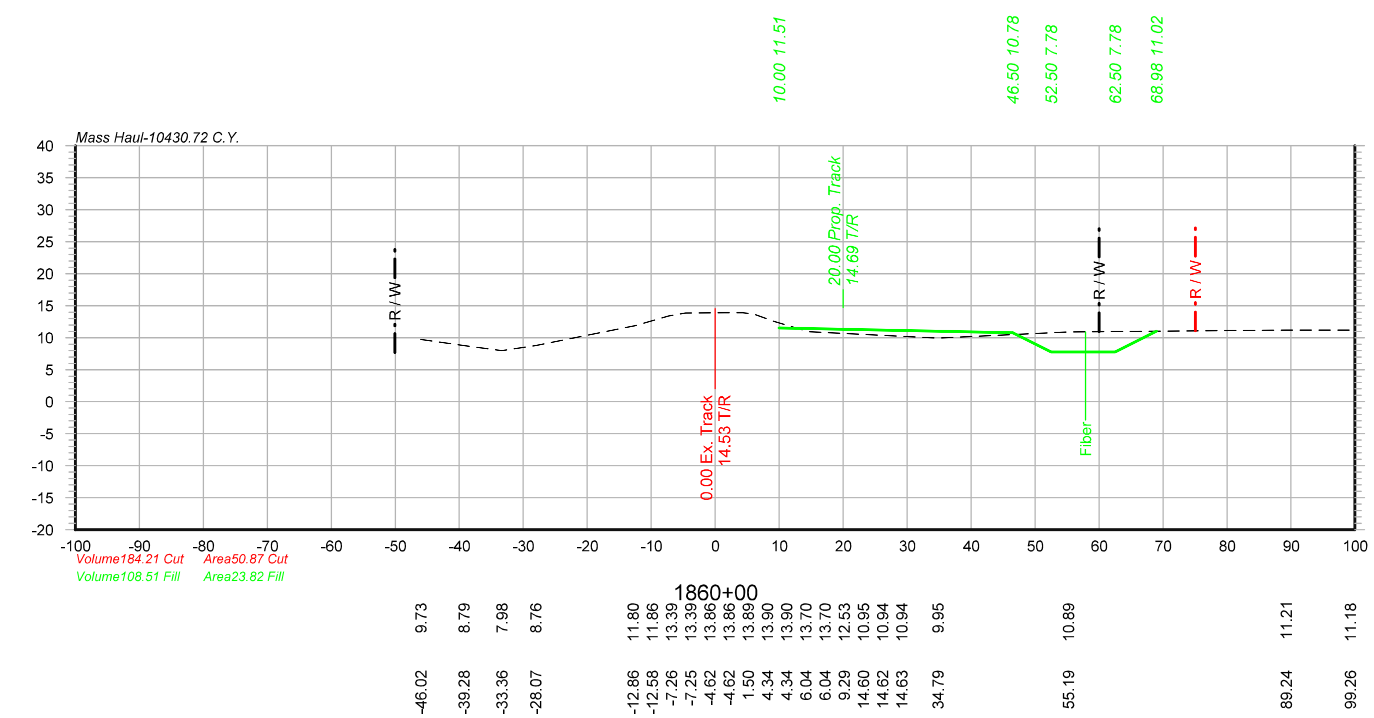

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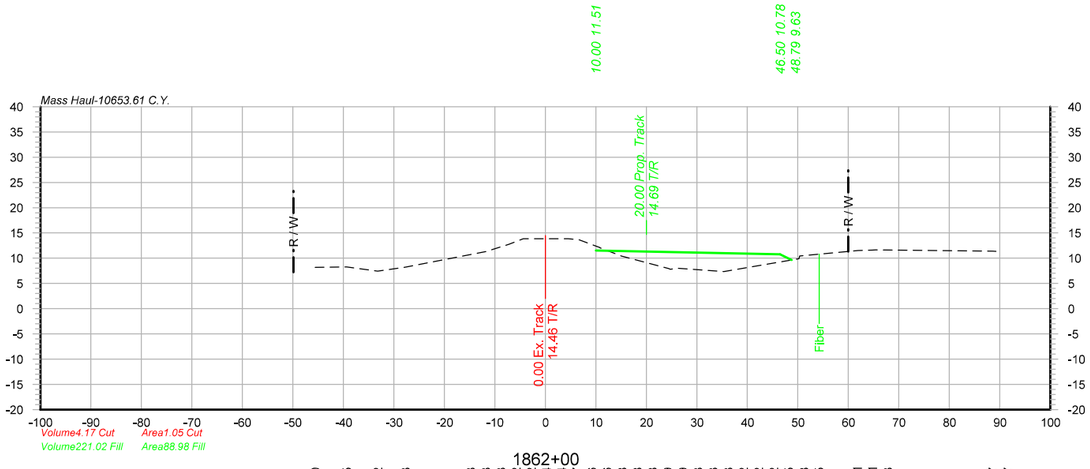
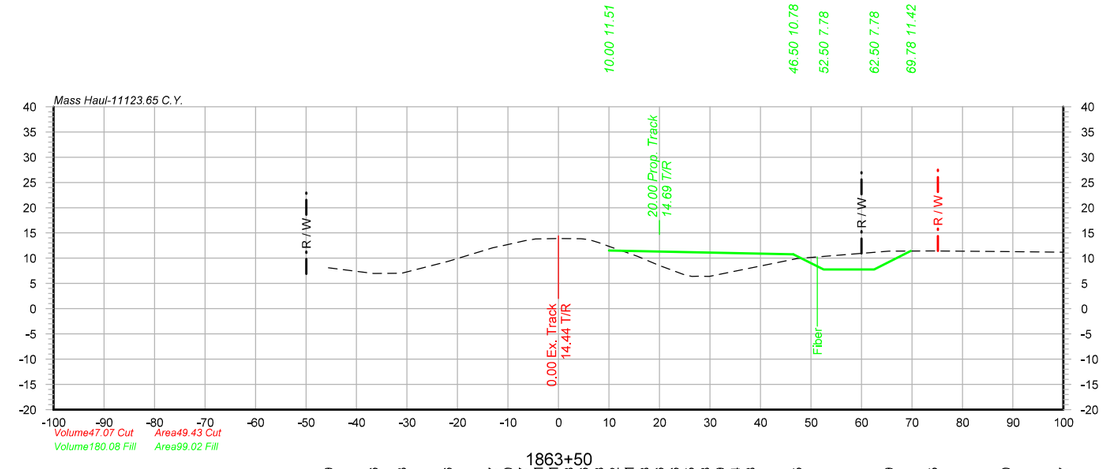
CHECKED BY: MJK	LOCATION & DESCRIPTION: CONSTRUCT CALCASIEU RUN-THROUGH SLOT LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)
DATE: 09/06/13	
SHEET NUMBER X020 of 027	SHEET TITLE: CROSS SECTIONS STA.1858+00 TO STA.1861+00



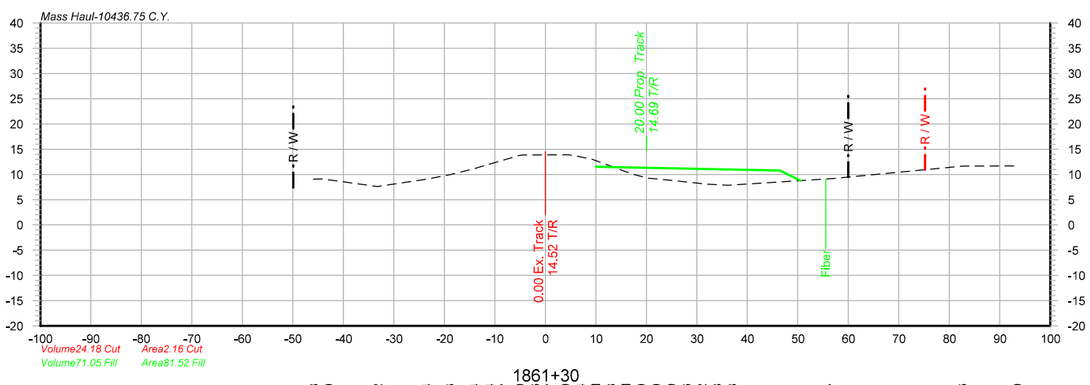
1862+00

-45.58	8.20
-39.32	8.25
-33.20	7.42
-27.70	8.23
-11.79	11.33
-11.79	11.33
-11.79	11.33
-7.29	12.72
-7.29	12.72
-4.38	13.84
-4.31	13.84
4.56	13.87
6.68	13.66
6.69	13.66
10.79	12.08
10.79	12.08
13.62	10.98
15.14	10.39
15.14	10.39
15.35	10.33
24.46	7.93
24.73	7.83
24.77	7.82
24.82	7.82
26.06	8.02
35.36	7.35
50.24	9.88
50.37	10.45
61.96	11.51
64.80	11.61
65.39	11.63
88.60	11.37
89.25	11.37



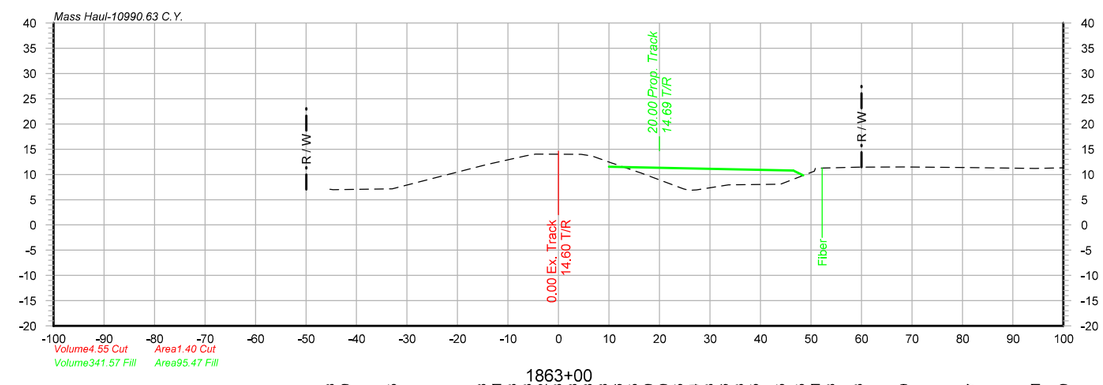
1863+50

-45.56	8.09
-36.63	6.96
-31.04	7.03
-21.94	9.36
-13.00	12.07
-10.46	12.60
-6.58	13.47
-5.75	13.61
-4.54	13.81
-0.06	13.88
4.44	13.86
5.24	13.78
6.30	13.62
8.15	13.01
10.22	12.28
12.89	11.36
15.71	10.36
19.77	8.65
24.78	6.78
26.42	6.39
27.77	6.44
29.86	6.38
47.30	9.95
65.42	11.39
74.17	11.45
88.61	11.30
100.00	11.17



1861+30

-45.91	9.08
-44.11	9.09
-33.24	7.62
-23.49	9.04
-18.96	9.93
-14.04	11.14
-12.72	11.54
-6.78	13.27
-5.91	13.80
-4.51	13.86
-1.86	13.87
4.47	13.90
5.10	13.84
6.32	13.61
9.35	12.98
10.57	12.51
14.26	11.19
15.53	10.69
17.45	10.00
20.23	9.26
23.08	9.02
32.19	8.08
36.16	7.88
56.96	9.17
82.60	11.66
93.49	11.70



1863+00

-45.28	7.08
-44.62	7.00
-32.92	7.15
-15.25	11.68
-13.94	12.01
-6.24	13.73
-6.22	13.73
-4.55	14.02
-4.54	14.03
4.44	13.98
4.48	13.98
4.49	13.98
6.62	13.66
6.65	13.65
10.76	12.20
10.77	12.20
16.11	10.35
16.16	10.34
24.73	7.13
25.84	6.86
27.32	6.93
33.67	7.95
43.95	8.05
50.66	10.65
50.87	11.21
50.92	11.23
59.33	11.43
68.35	11.49
81.72	11.37
94.45	11.21
100.00	11.30

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CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1861+30 TO STA.1863+50

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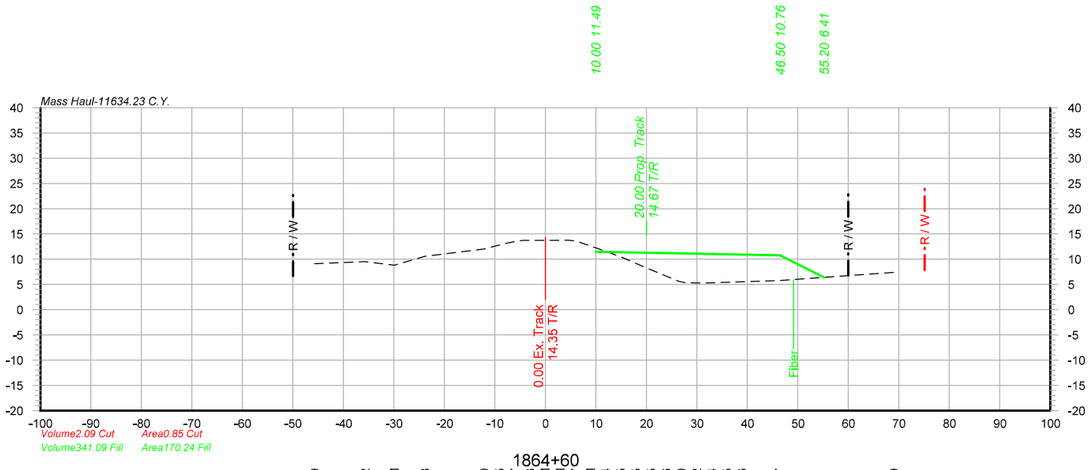
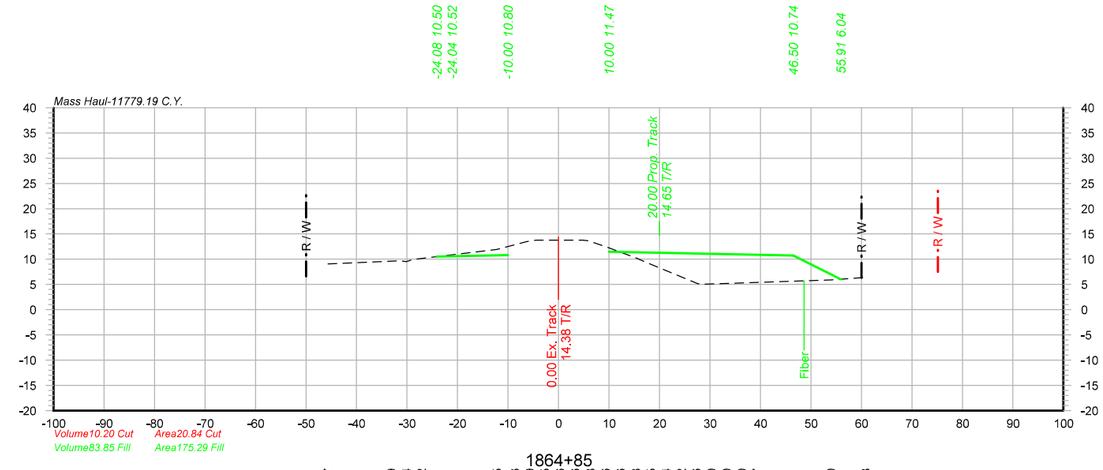


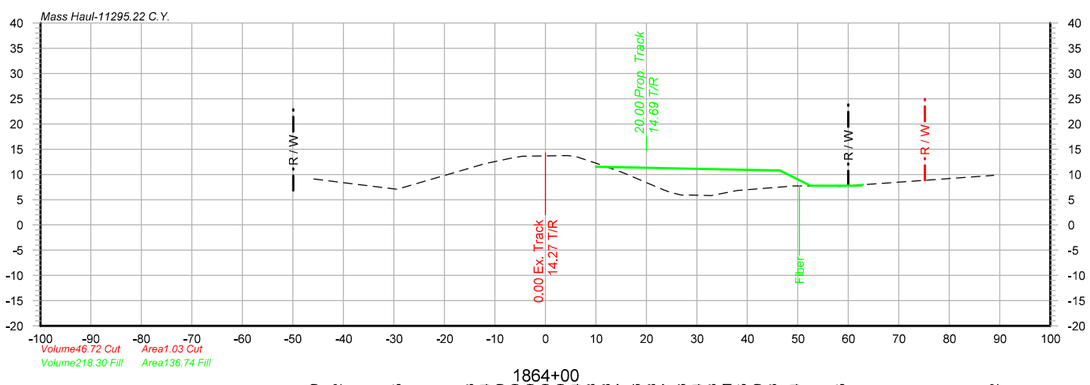
1864+60

9.09	-45.70
9.52	-35.74
8.81	-29.92
10.58	-23.88
12.00	-12.13
13.05	-8.11
13.47	-6.07
13.63	-5.10
13.71	-4.41
13.71	0.94
13.77	4.52
13.71	5.15
13.64	5.90
13.15	7.38
12.35	9.68
11.55	11.95
10.26	15.37
8.20	20.22
5.62	26.48
5.34	27.66
5.35	28.02
5.26	31.14
5.77	46.29
7.39	69.02



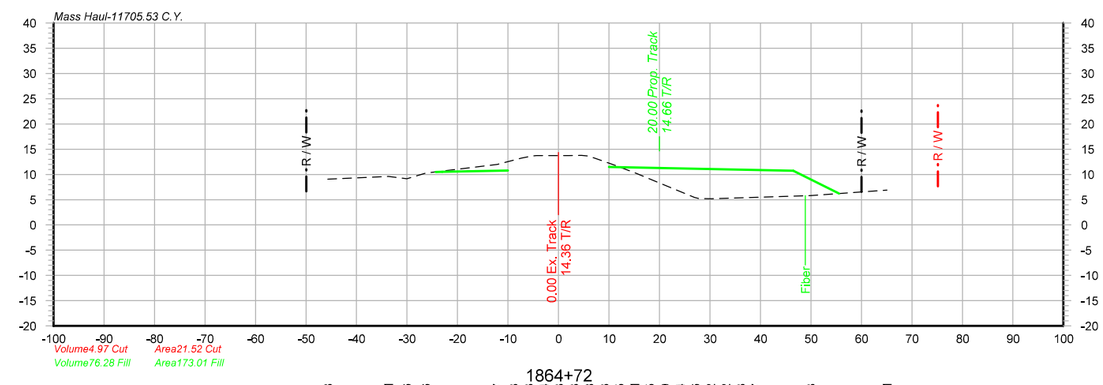
1864+85

9.07	-45.65
9.69	-31.41
9.54	-30.15
9.92	-28.84
11.95	-12.18
13.43	-6.48
13.59	-5.70
13.63	-5.34
13.76	-4.35
13.76	3.20
13.78	4.57
13.76	4.81
13.66	5.86
13.48	6.43
12.35	9.68
12.04	10.57
10.22	15.40
9.36	17.43
5.20	27.49
5.10	27.94
5.10	28.08
5.07	29.26
5.90	53.95
6.38	60.79



1864+00

9.10	-45.83
8.52	-41.26
7.05	-29.37
11.83	-13.05
12.14	-12.03
12.50	-10.30
13.19	-6.95
13.59	-4.54
13.59	-4.54
13.59	-4.49
13.74	4.40
13.58	5.98
13.58	5.99
12.37	9.65
12.36	9.68
10.38	15.27
10.37	15.30
10.26	15.57
6.94	23.45
6.43	24.82
5.91	27.00
5.95	27.90
5.80	32.90
6.83	37.93
7.74	49.35
7.65	58.47
9.82	88.79



1864+72

9.08	-45.68
9.61	-33.66
9.16	-30.03
10.26	-26.26
11.97	-12.15
13.23	-7.33
13.53	-5.89
13.64	-5.22
13.73	-4.38
13.73	2.02
13.78	4.54
13.73	4.99
13.65	5.88
13.31	6.92
12.35	9.68
11.79	11.29
10.24	15.38
8.76	18.88
5.42	26.96
5.22	27.79
5.23	28.05
5.17	30.24
5.83	49.97
6.91	65.07

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SHEET NUMBER	X022 of 027

UNION PACIFIC RAILROAD

Office of Assistant Vice President
Engineering Design/Construction

LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1864+00 TO STA.1864+85

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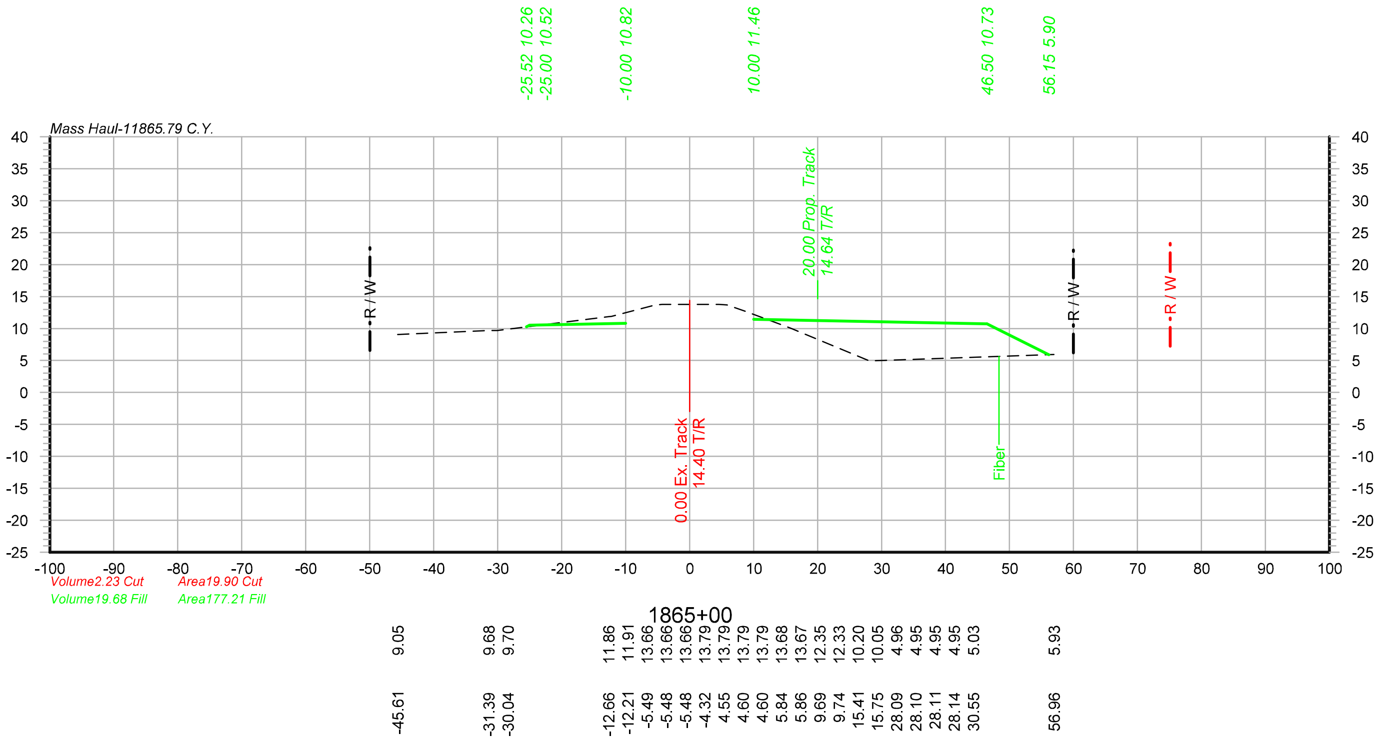

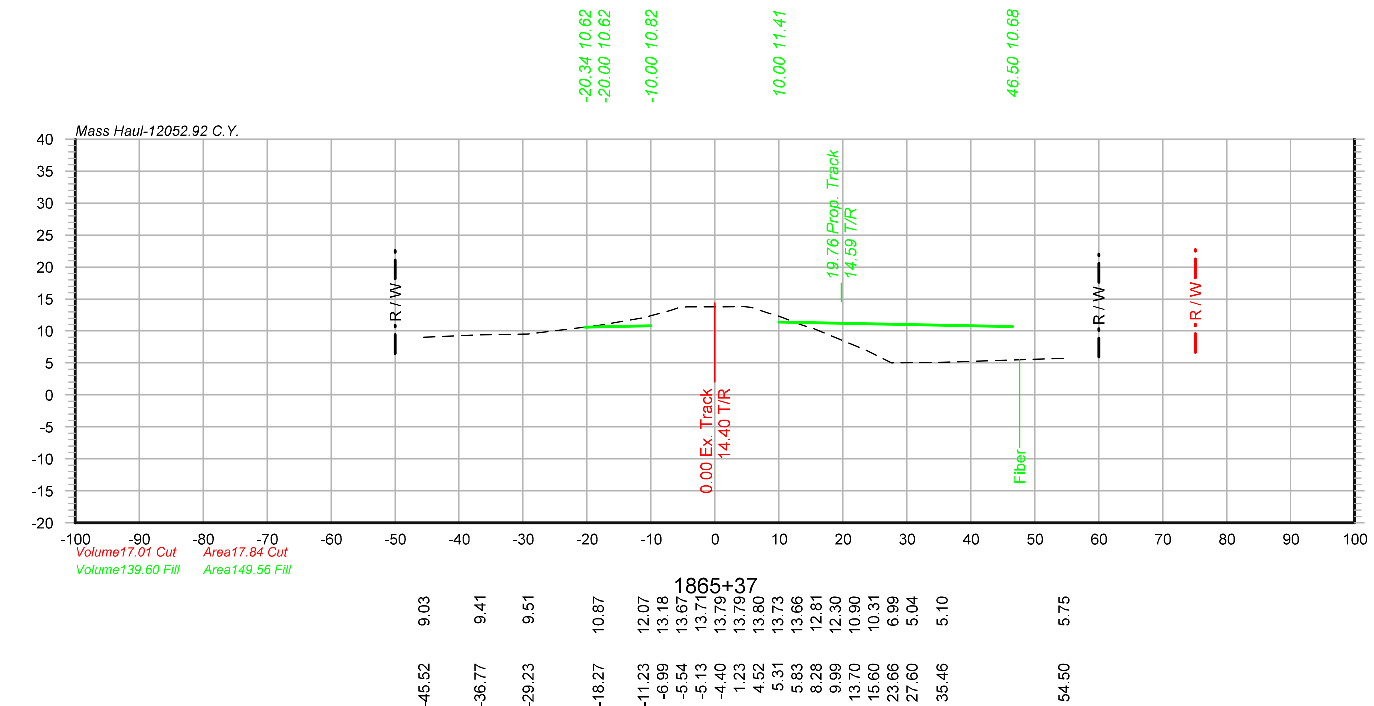

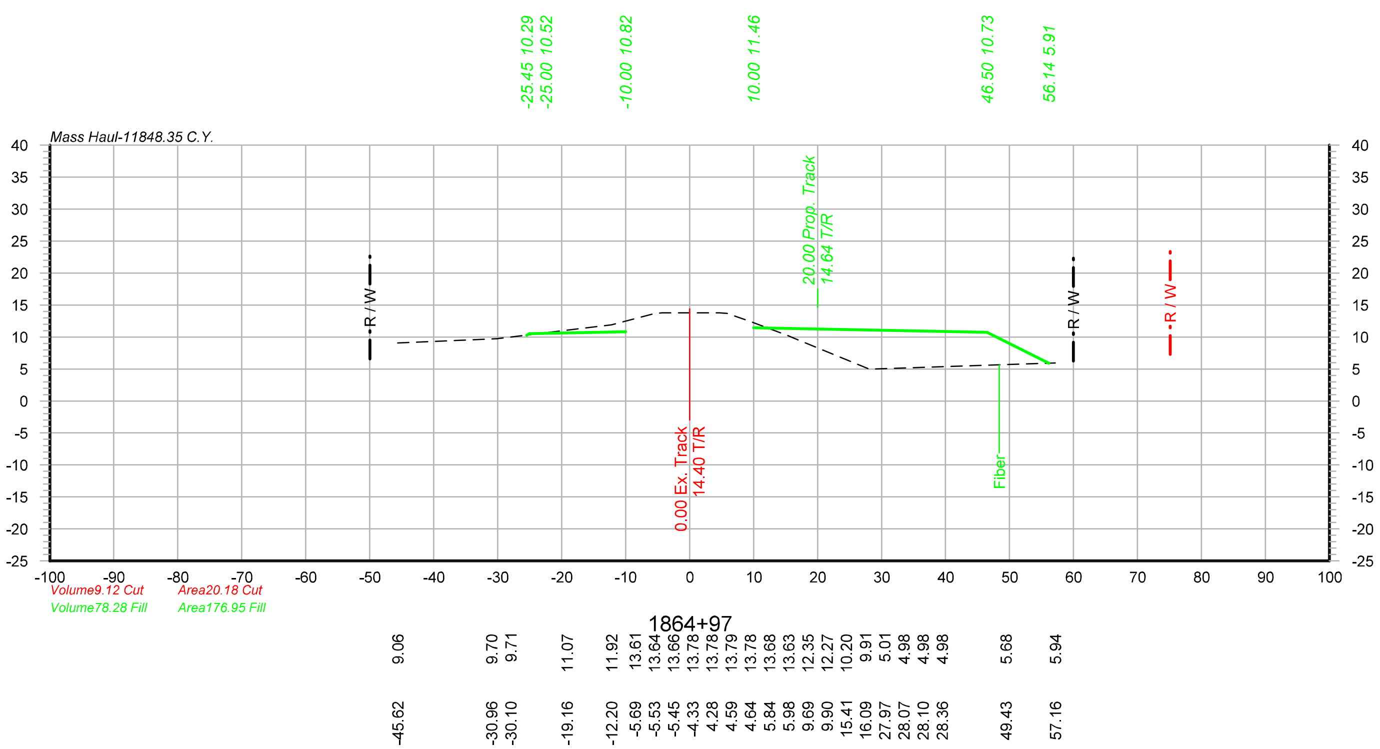

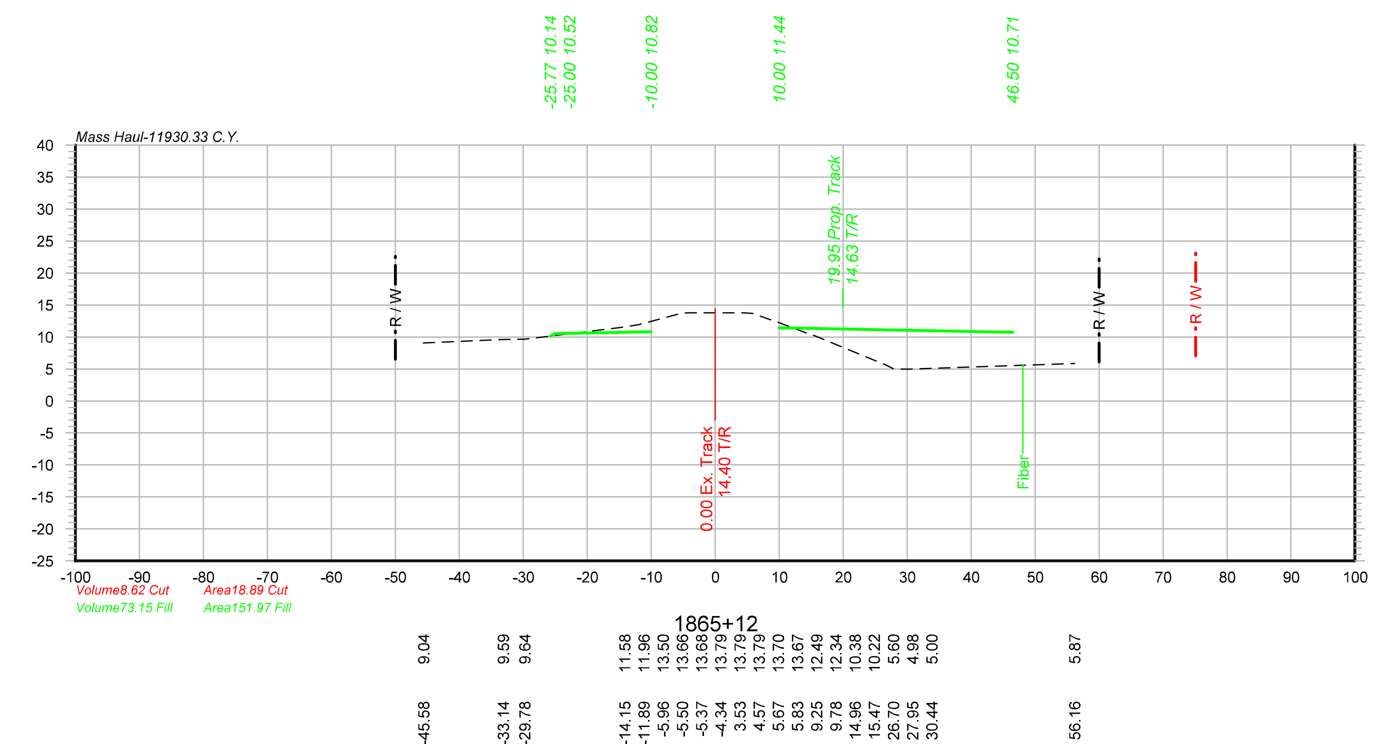

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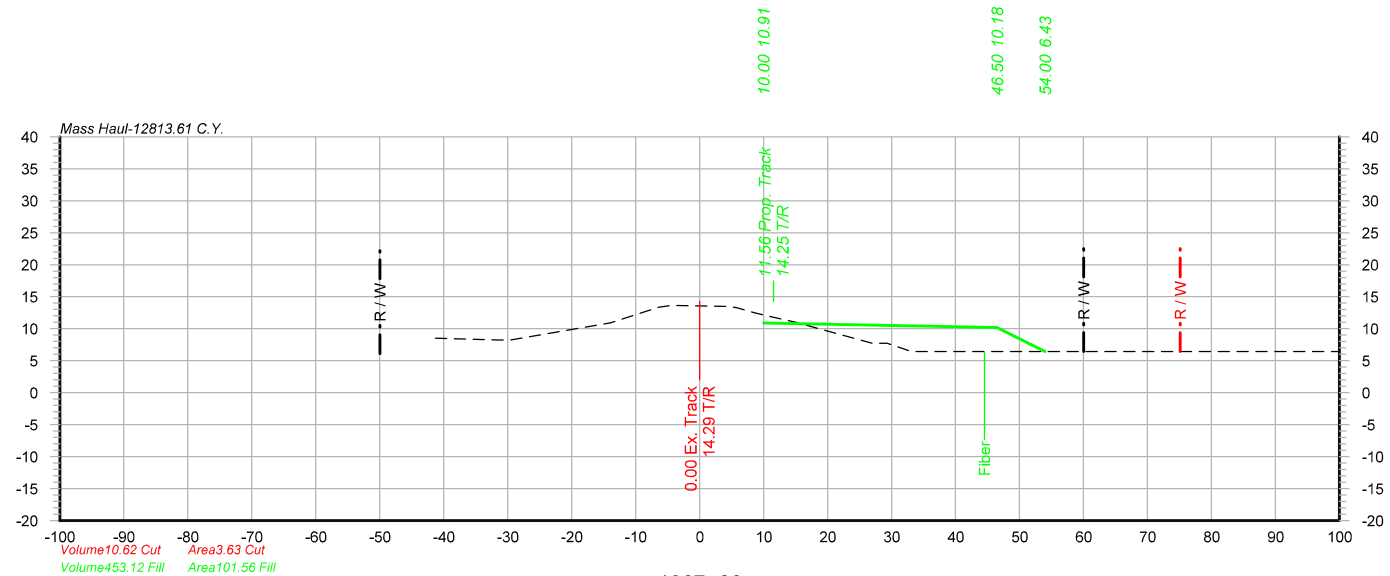
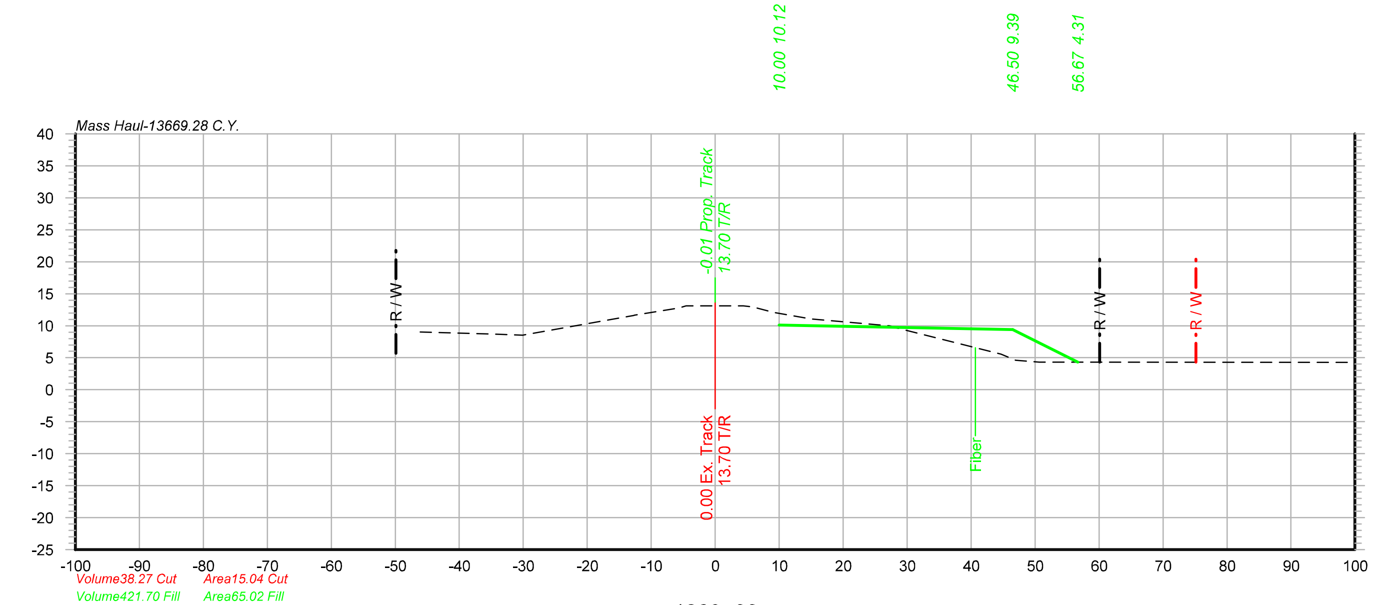
DATE: 09/06/13	
SHEET NUMBER X023 of 027	SHEET TITLE: CROSS SECTIONS STA.1864+97 TO STA.1865+37



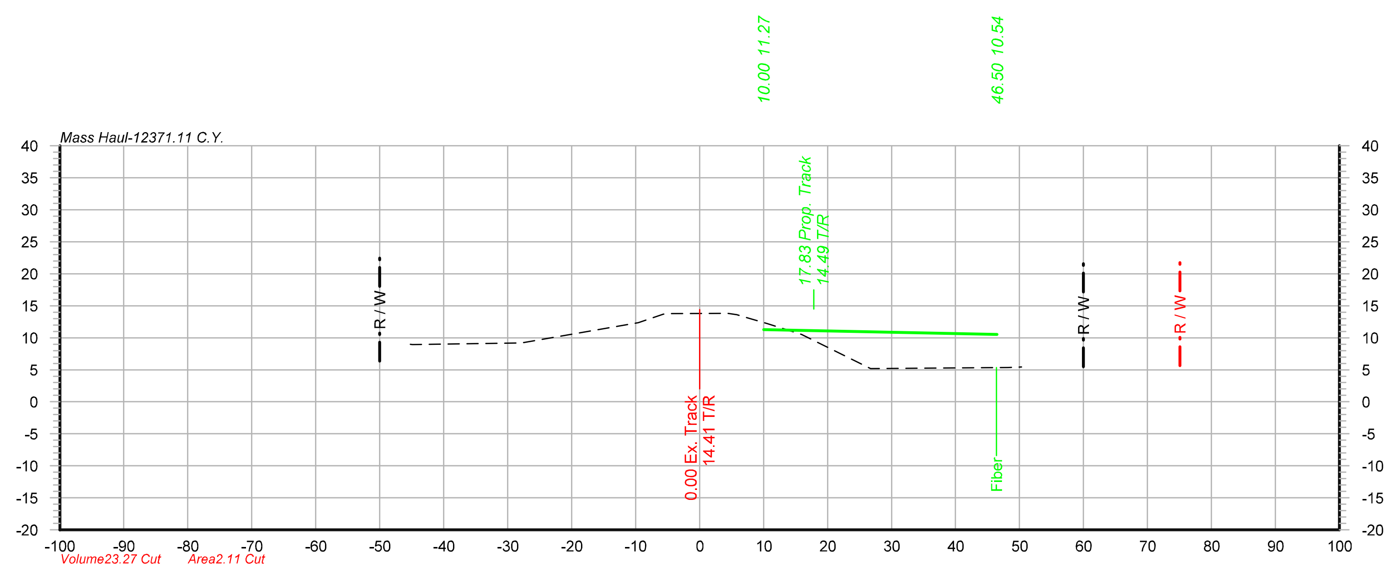
1867+00

Elevation	Offset
8.51	-41.28
8.24	-31.10
8.27	-29.36
10.89	-14.07
10.91	-14.00
10.91	-13.98
13.37	-6.40
13.65	-4.42
13.65	-4.42
13.65	-4.40
13.48	4.54
13.48	4.55
13.25	5.86
12.50	8.63
12.17	9.85
11.85	11.25
10.92	15.34
10.89	15.39
7.72	26.97
7.73	29.29
6.43	33.09
6.43	46.30
6.43	49.77
6.43	55.27
6.43	65.37
6.43	89.93
6.43	100.00



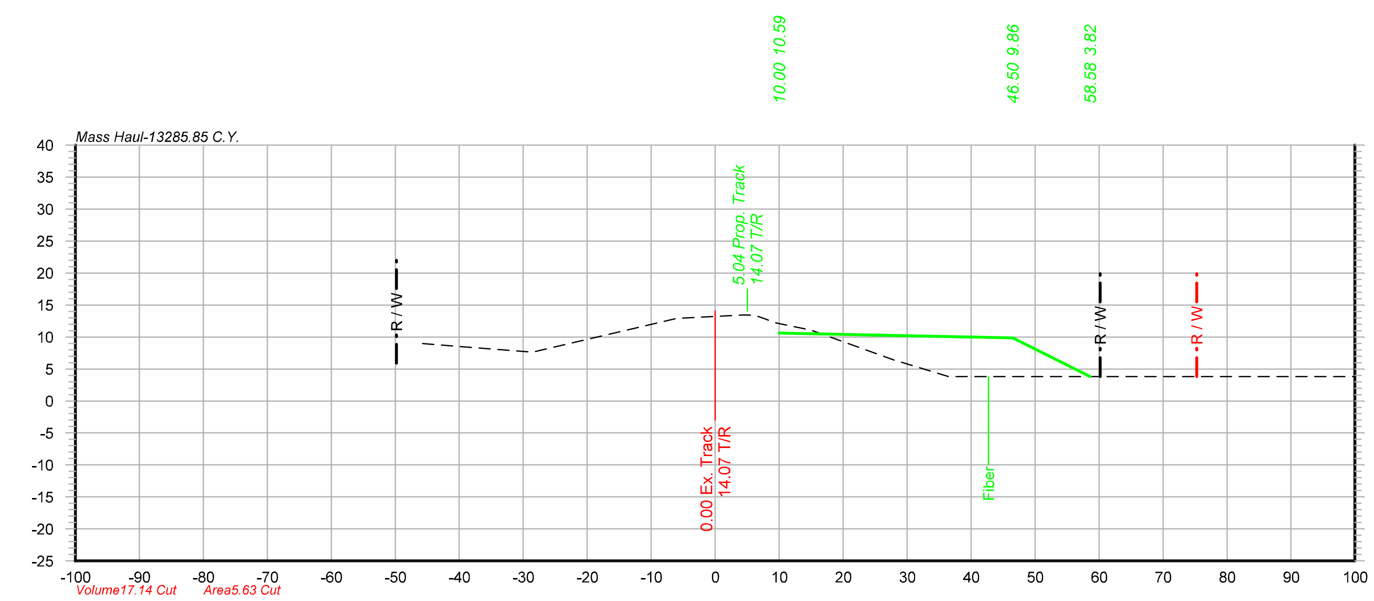
1869+00

Elevation	Offset
9.03	-46.10
8.67	-34.48
8.52	-30.05
8.57	-29.87
10.73	-17.69
11.61	-12.70
11.63	-12.62
12.76	-5.68
12.77	-5.66
13.10	-4.56
13.10	-4.55
13.10	-4.50
13.11	4.43
12.95	5.87
12.95	5.88
12.08	9.22
12.08	9.23
12.08	9.25
11.08	14.96
9.99	27.30
9.83	27.74
5.56	44.69
4.62	46.96
4.31	50.61
4.31	50.91
4.31	51.42
4.31	52.50
4.31	56.21
4.29	100.00



1866+00

Elevation	Offset
8.96	-45.23
8.95	-44.86
9.18	-28.01
9.29	-27.37
12.34	-9.58
13.69	-5.68
13.70	-5.66
13.70	-5.65
13.79	-4.53
13.83	4.37
13.83	4.39
13.62	5.82
13.62	5.82
13.62	5.82
13.08	7.63
12.22	10.51
12.22	10.52
10.52	15.93
10.49	16.00
5.19	26.72
5.37	48.13
5.44	50.31



1868+00

Elevation	Offset
8.96	-45.71
8.95	-45.37
8.32	-37.49
7.64	-28.77
7.63	-28.46
11.87	-10.46
11.90	-10.31
12.86	-6.24
12.89	-6.09
12.89	-6.09
12.99	-4.53
13.45	4.45
13.45	4.45
13.45	4.45
13.41	6.20
13.41	6.21
12.20	9.54
11.05	14.98
11.05	14.99
11.05	15.00
6.26	28.30
6.07	29.07
3.82	36.48
3.82	41.83
3.82	43.27
3.82	45.63
3.82	50.21
3.82	62.96
3.82	100.00

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SHEET TITLE:
CROSS SECTIONS STA.1866+00 TO STA.1869+00

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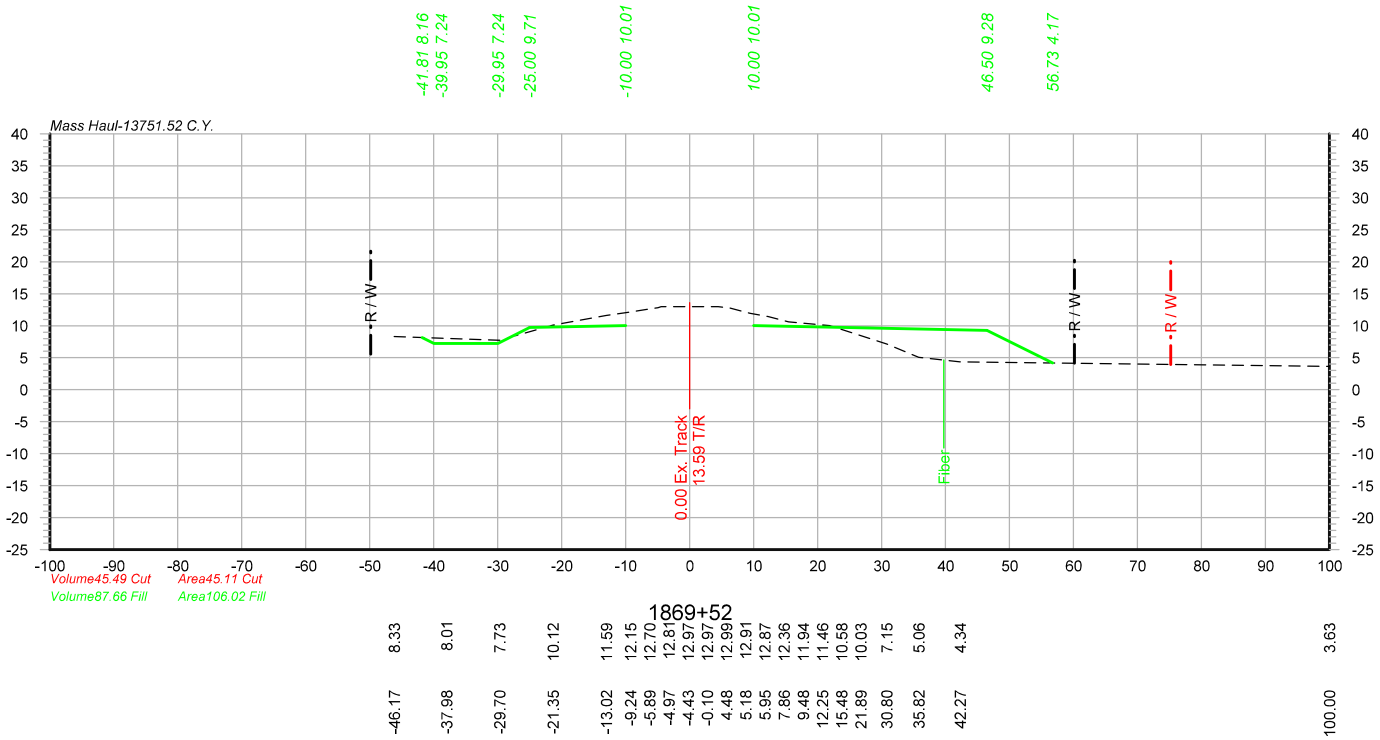

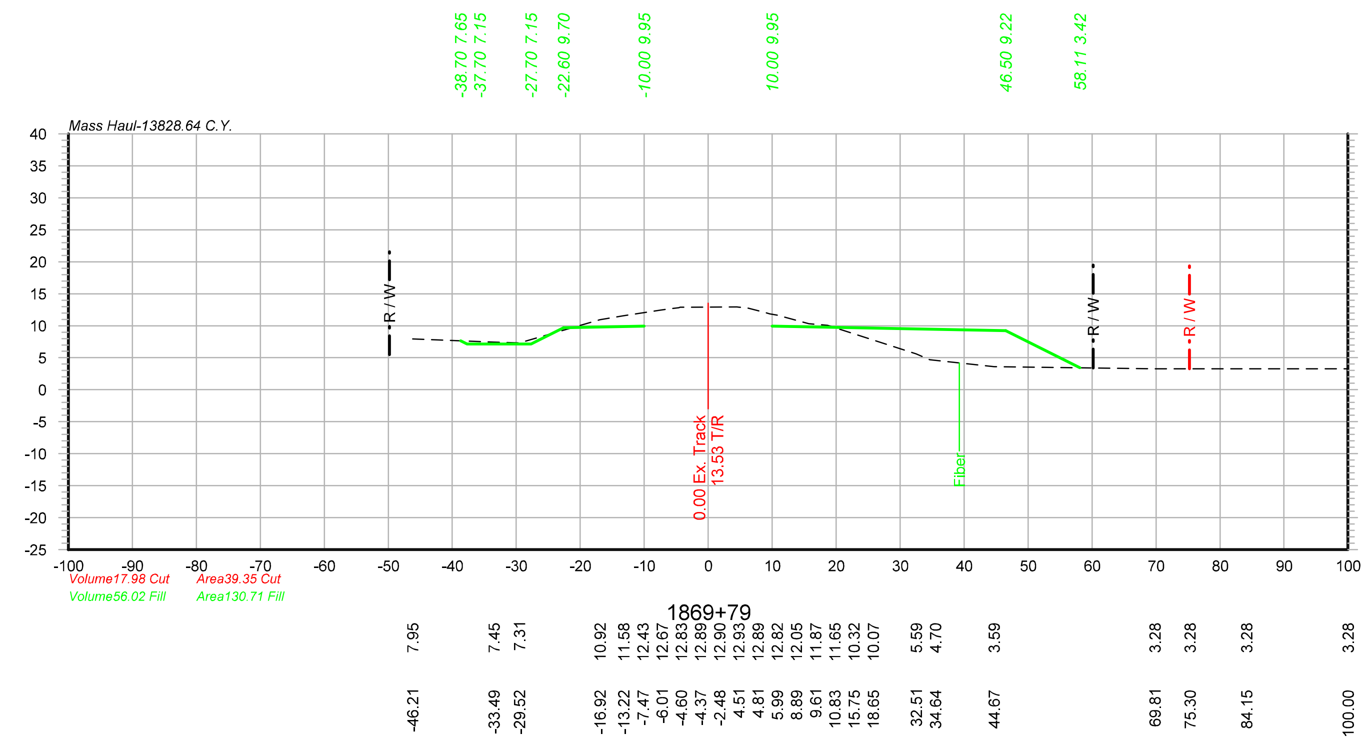

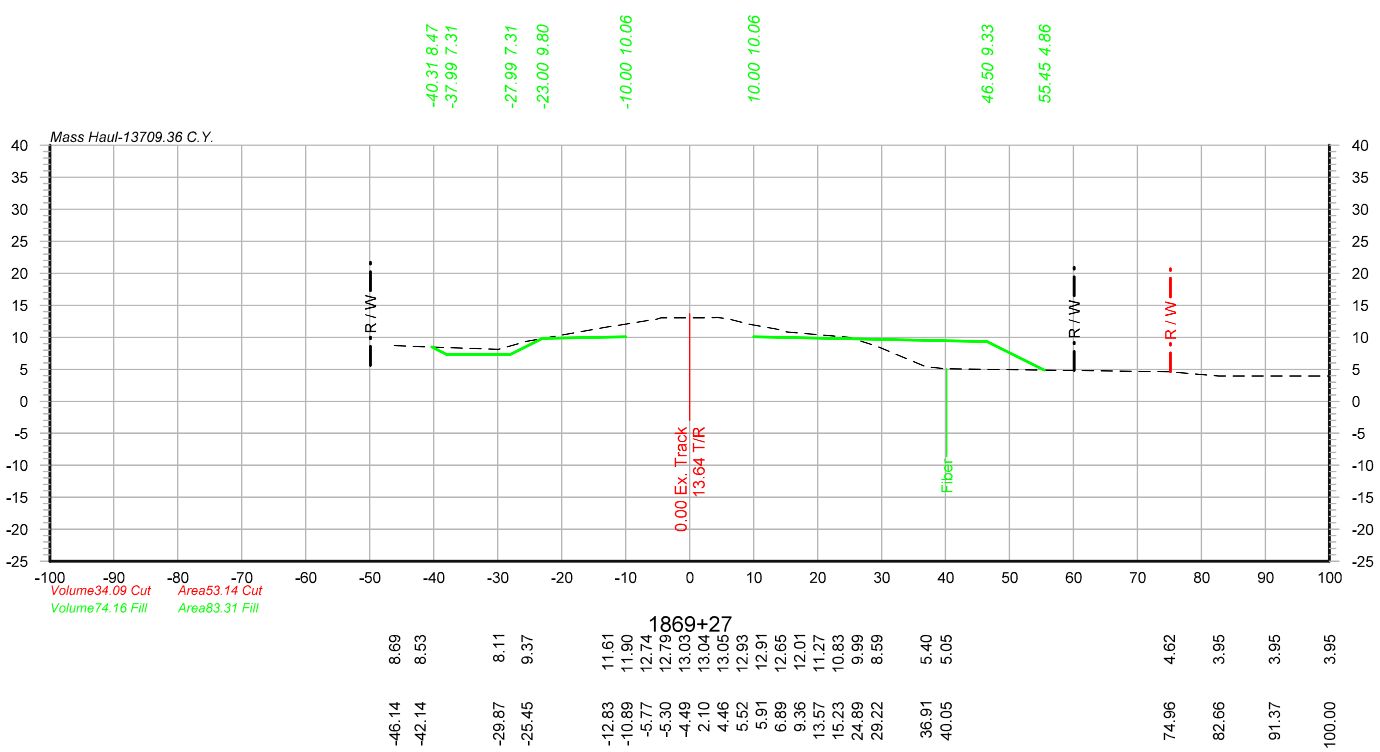

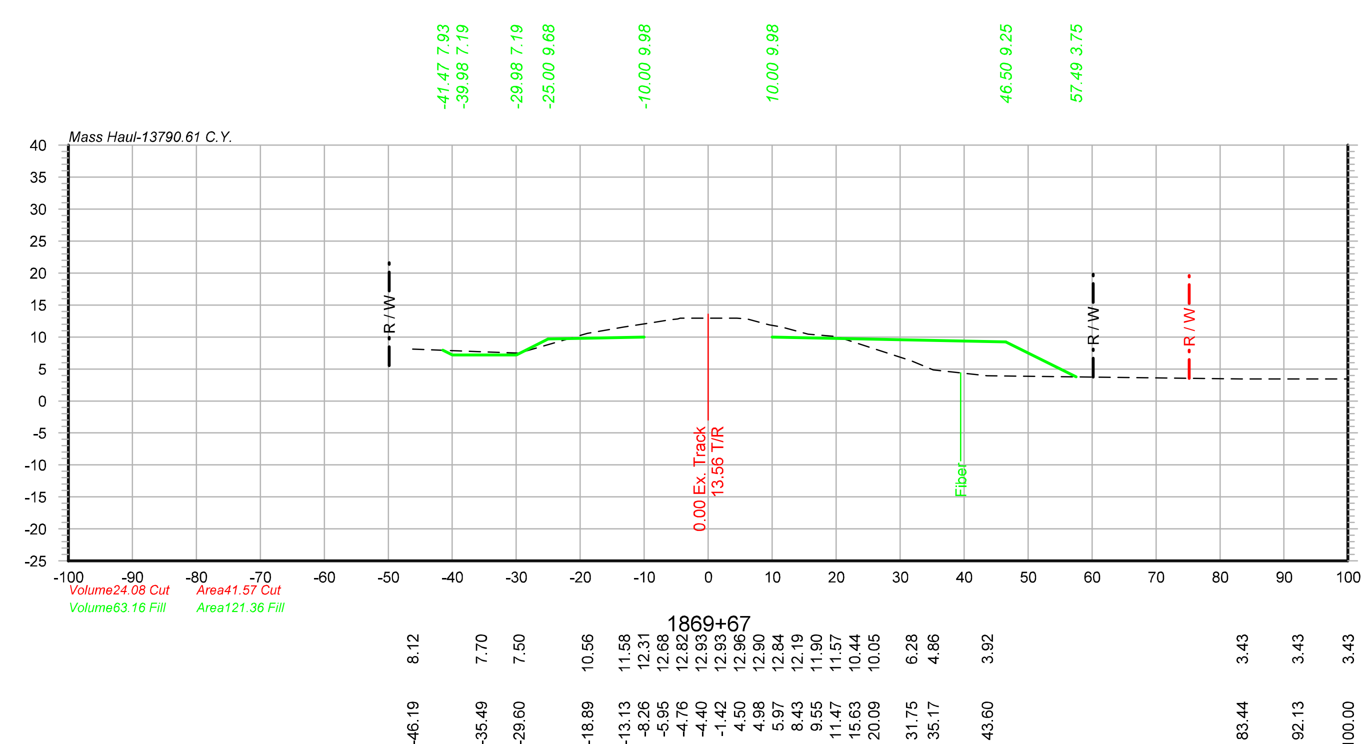

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DATE: 09/06/13	
SHEET NUMBER X025 of 027	SHEET TITLE: CROSS SECTIONS STA.1869+27 TO STA.1869+79

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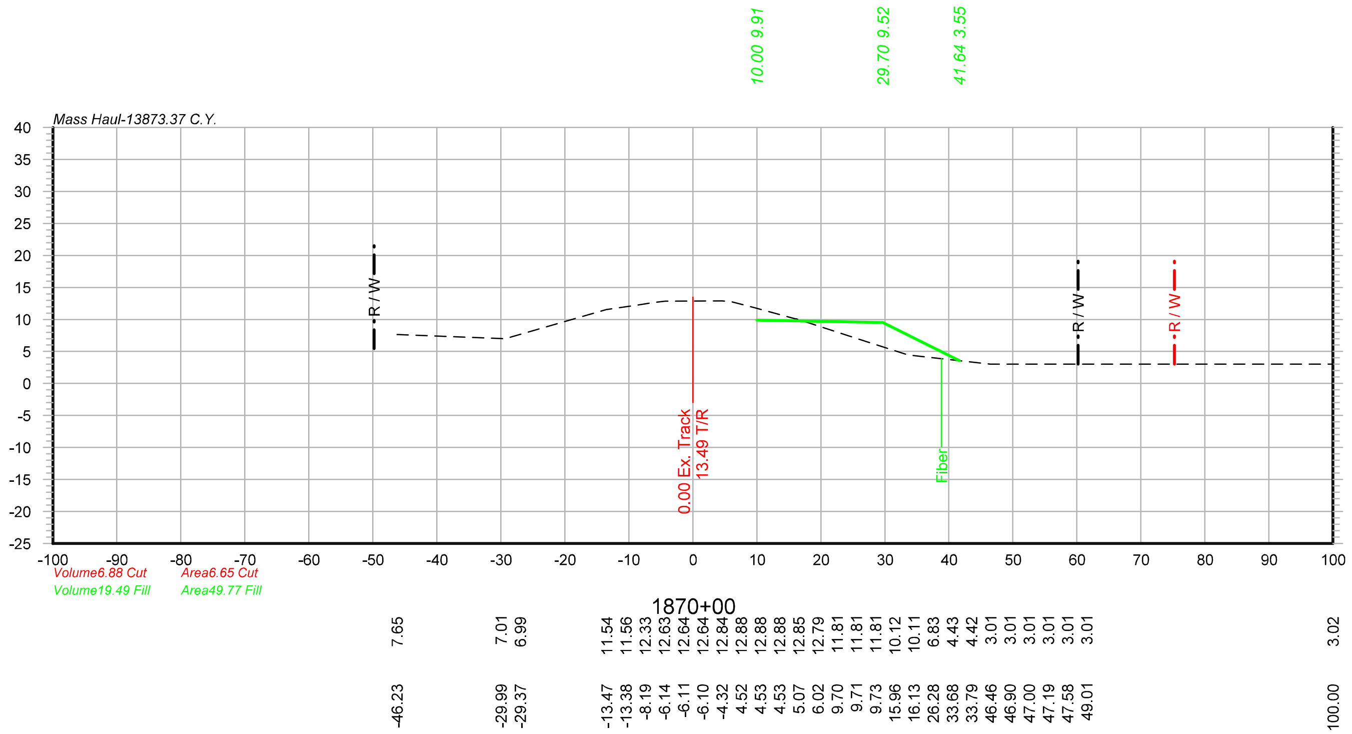

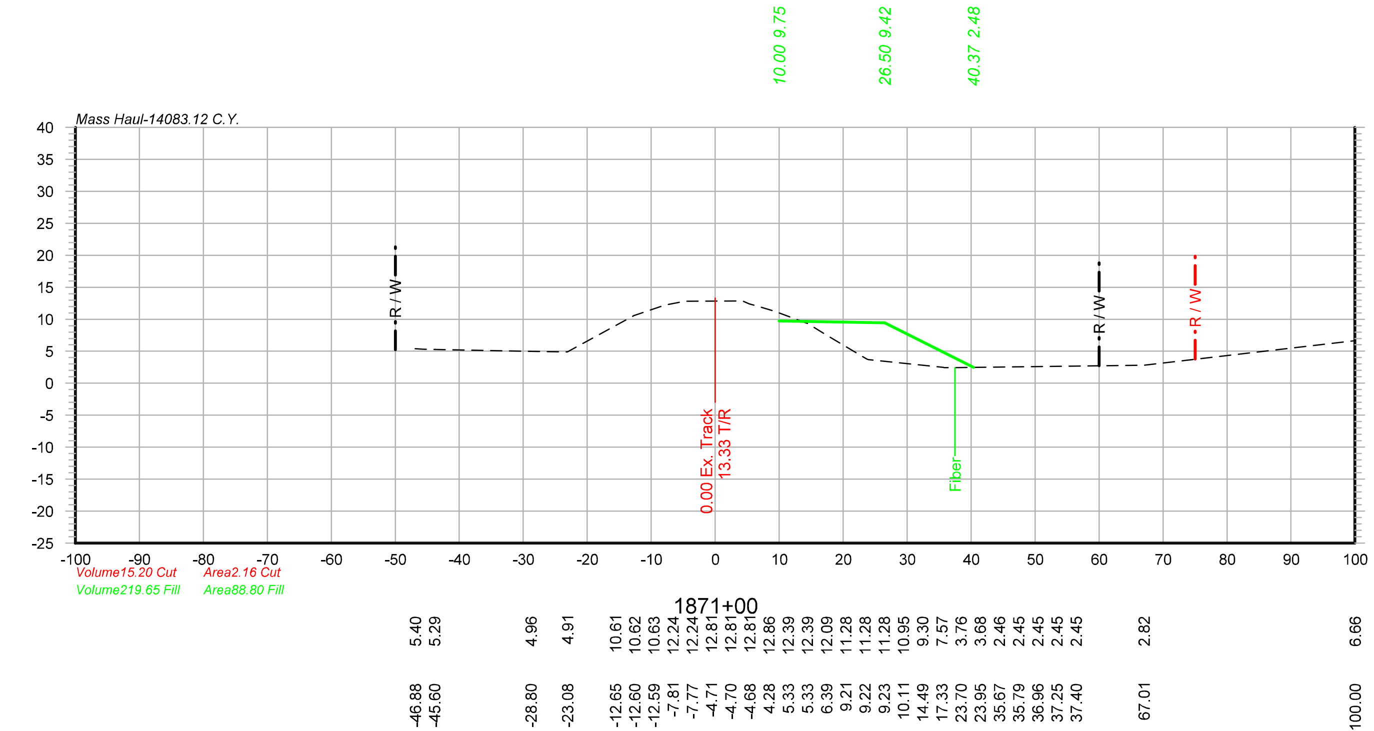

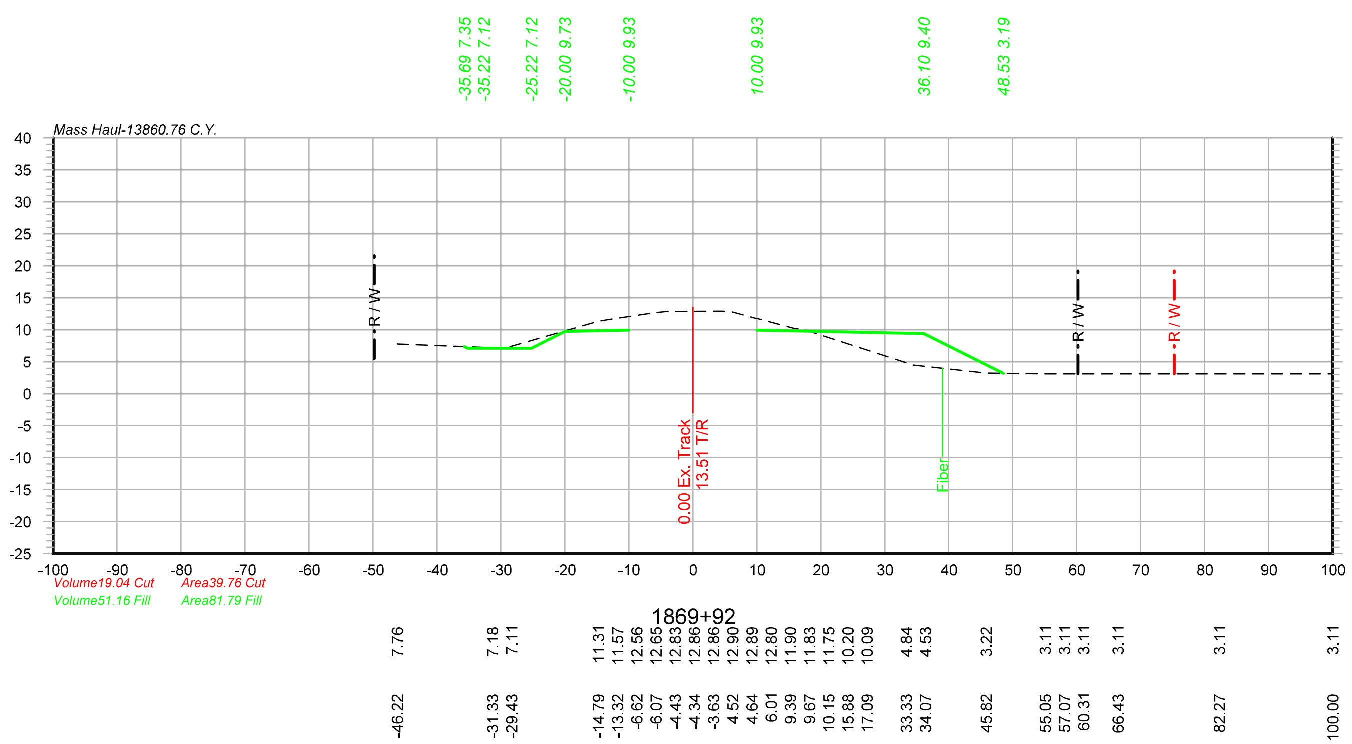

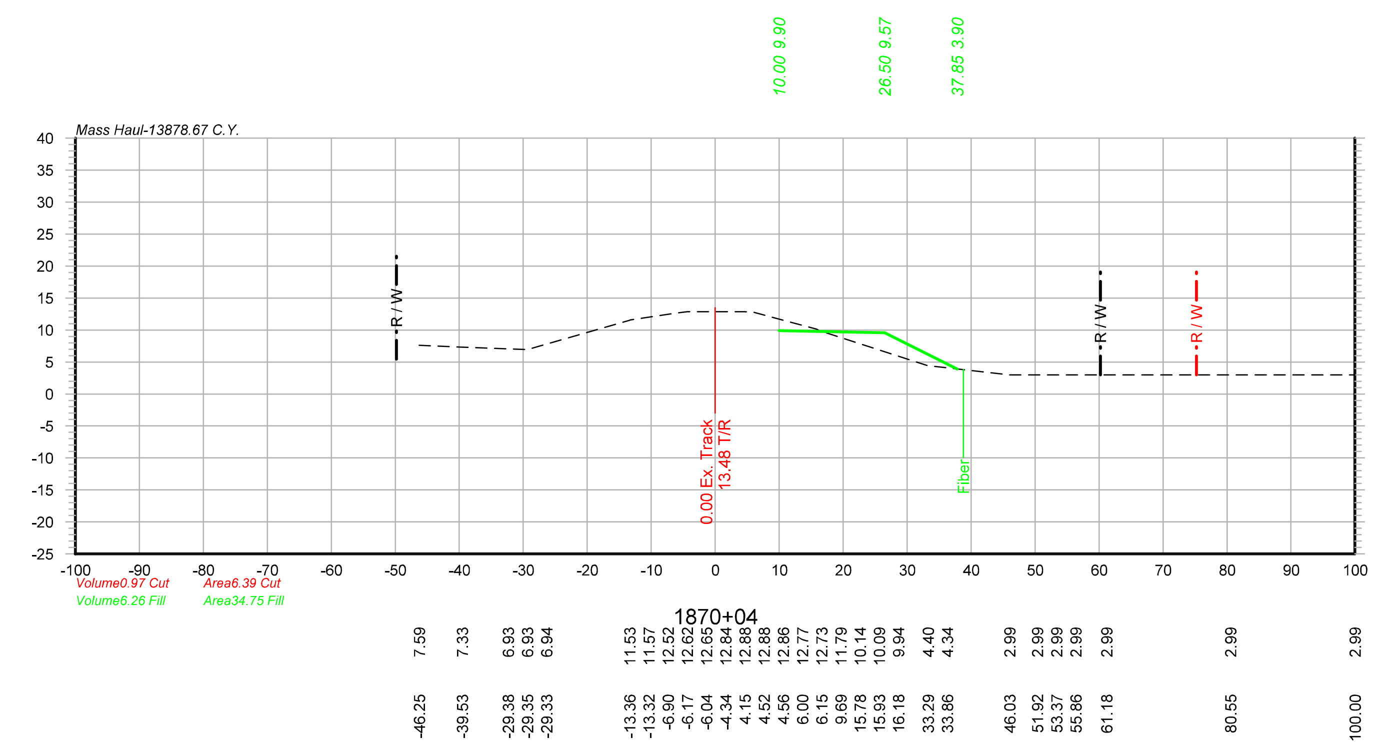

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DATE: 09/06/13		
SHEET NUMBER X026 of 027	SHEET TITLE: CROSS SECTIONS STA.1869+92 TO STA.1871+00	

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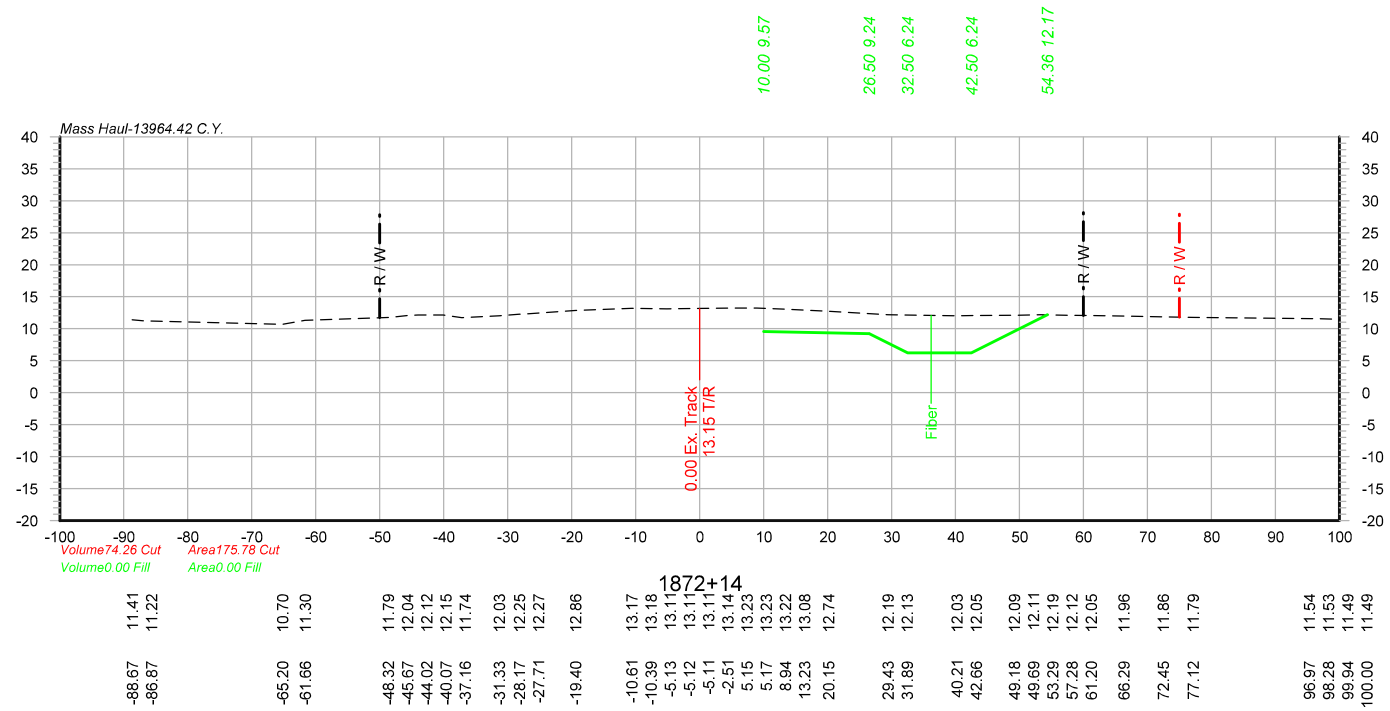

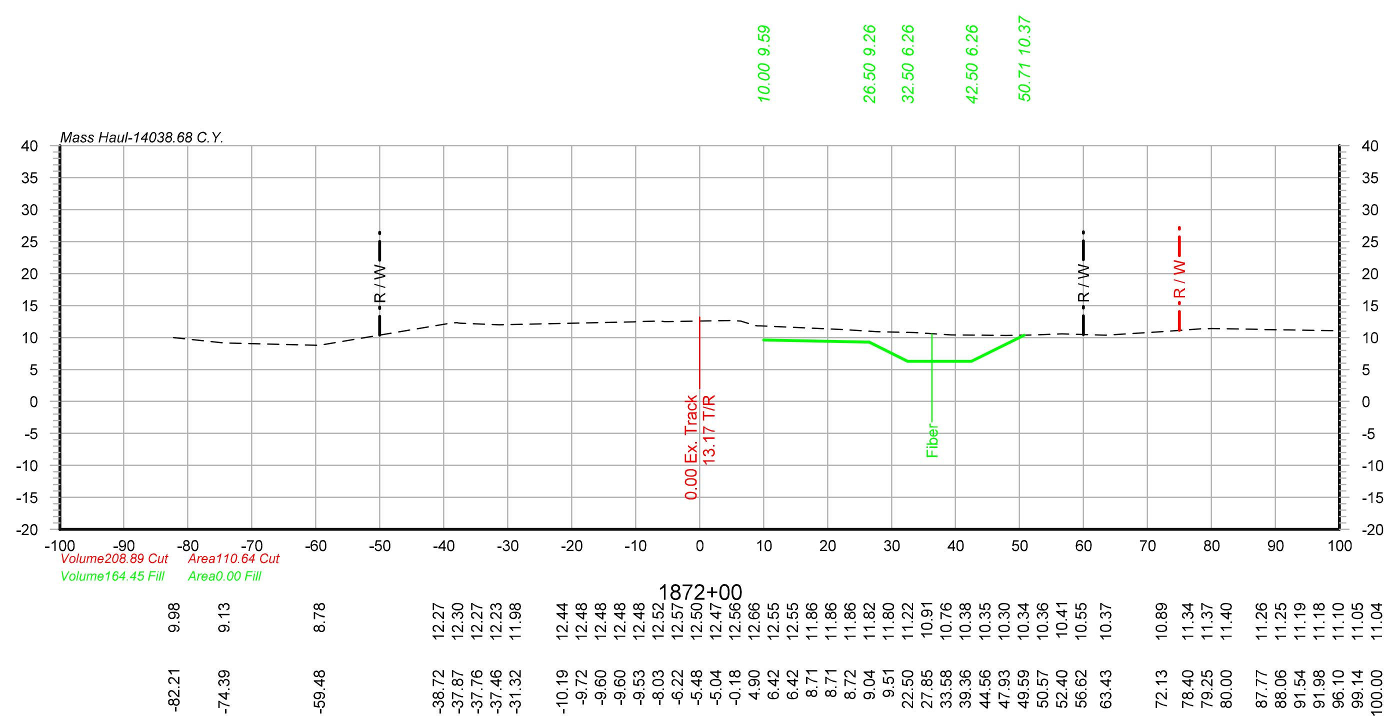

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LOCATION & DESCRIPTION:
CONSTRUCT CALCASIEU RUN-THROUGH SLOT
LAFAYETTE SUBDIVISION (MP 221.31 - MP 222.92)

SHEET TITLE:
CROSS SECTIONS STA.1872+00 TO STA.1872+14

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