

INFORMATION HANDOUT

For Contract No. 09-353104

At 09-Mno-395-6.9/R9.9

Identified by

Project ID 091200000

MATERIALS INFORMATION

Section 1

EXISTING PAVEMENT INFORMATION

Section 2

ALTERNATIVE FLARED TERMINAL SYSTEM DETAILS

SECTION 1

EXISTING PAVEMENT INFORMATION

EXISTING PAVEMENT INFORMATION

**Contract Number
09-353101**

**09-MNO-395
PM 6.9/9.9**

**Cold In-Place Recycling and
Hot Mix Asphalt Overlay**

TABLE OF CONTENTS

Cover Sheet	1
Summary of Investigations	2
AC Thickness Chart	3
Field Notes	4
Core Pictures	5 - 18

Summary of Investigations

Pavement investigations were conducted on Route 395 from PM 6.9 to PM 10.3 for cold in-place recycling. Cores indicate that the engineering properties of these materials may be improved to provide sufficient strength required to extend the life of this pavement for a few years by recycling the upper portion with asphalt emulsion and capping with hot mix asphalt.

The general structural section is hot mix asphalt over aggregate base. Cores indicate a depth of hot mix asphalt that range from 0.50+ foot to 0.92 foot. Some of the core samples were delaminated. Some of the bottom layers of the cores are cracked.

The existing asphalt concrete appears to have some pumping failures, transverse (thermal), occasional longitudinal, and occasional to nearly continuous alligator cracking.

Any reliance placed by the contractor on this information shall be at their own risk and they shall undertake their own separate testing program to determine the materials present and conditions prevailing at the time of construction.

AC Thickness Chart

Northbound

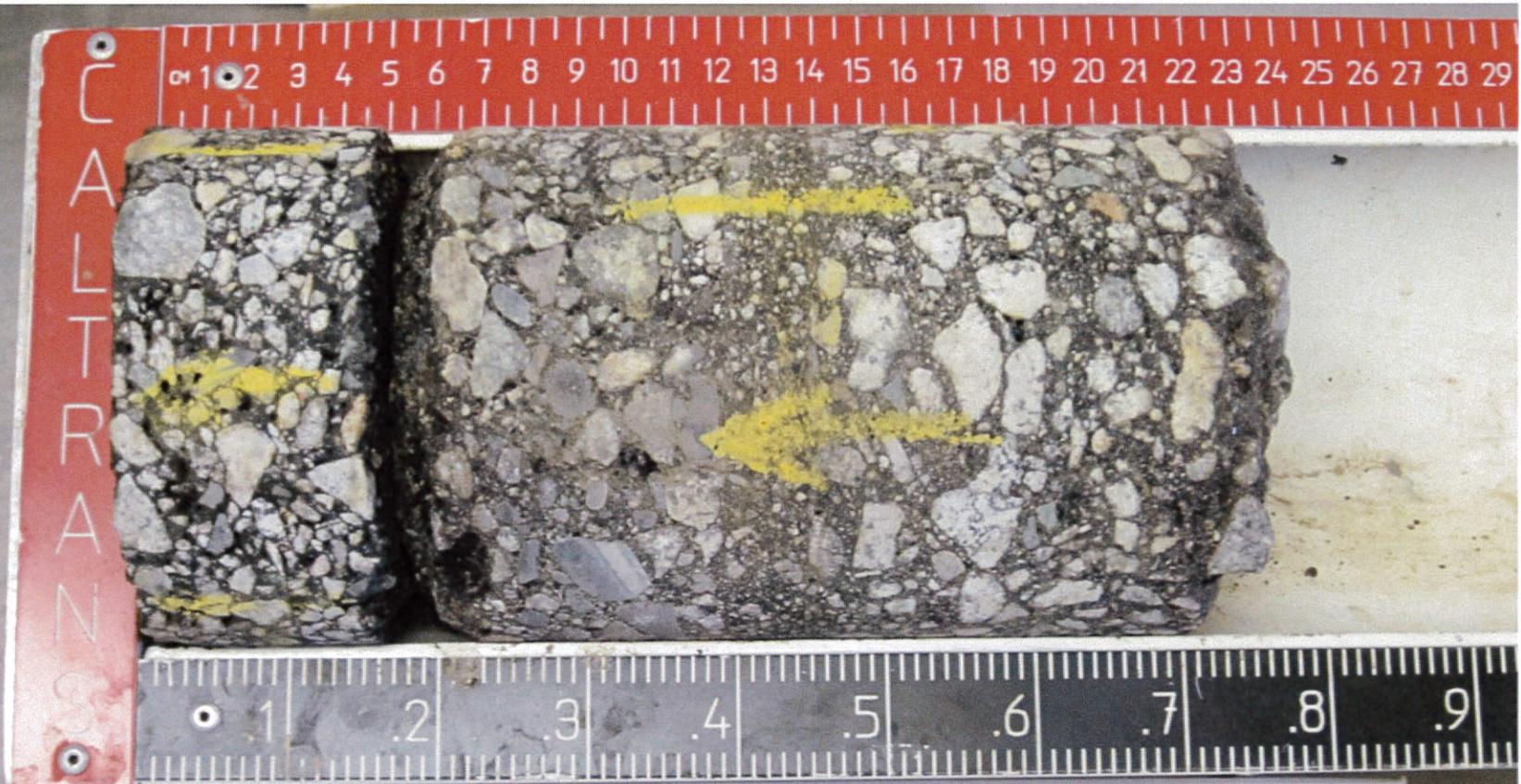
Southbound

PM 6.9	Core #1	0.77'	PM 9.9	Core #8	0.83'
PM 7.4	Core #5	0.80'	PM 9.4	Core #12	0.84'
PM 7.9	Core #2	0.67'	PM 8.9	Core #9	0.97'
PM 8.4	Core #6	0.78'	PM 8.4	Core #13	> 0.50'
PM 8.9	Core #3	0.92'	PM 7.9	Core #10	0.78
PM 9.4	Core #7	0.88'	PM 7.4	Core #14	0.62'
PM 9.9	Core#4	0.83'	PM 6.9	Core #11	0.91'

Field Notes

Core	PM	Lane	Info
#1	6.9	NB#2	Full Depth Core/ Agg Base/Core Broke apart trying to extract
#2	7.9	NB#2	Full Depth Core/ Agg Base /Core Broke Apart trying to extract
#3	8.9	NB#2	Full Depth Core/Agg Base under AC
#4	9.9	NB#2	Full Depth Core/ Agg Base / Core Broke in Half during extraction
#5	7.4	NB#1	Full Depth Core/ Agg Base
#6	8.4	NB#1	Full Depth Core / Agg Base
#7	9.4	NB#1	Full Depth Core / Agg Base
#8	9.9	SB#1	Full Depth Core / Agg Base
#9	8.9	SB#1	Full Depth Core / Agg Base
#10	7.9	SB#1	Full Depth Core / Agg Base
#11	6.9	SB#1	Full Depth Core / Agg Base
#12	9.4	SB#2	Full Depth Core / Agg Base
#13	8.4	SB#2	Full Depth Core / Agg Base / Core Broke apart during extraction, core length is longer than .5 tenths
#14	7.4	SB#2	Full Depth Core / Agg Base / Core Broke apart during extraction

Also every core location is either plus/minus 150ft from actual PM. But in general area of actual PM.



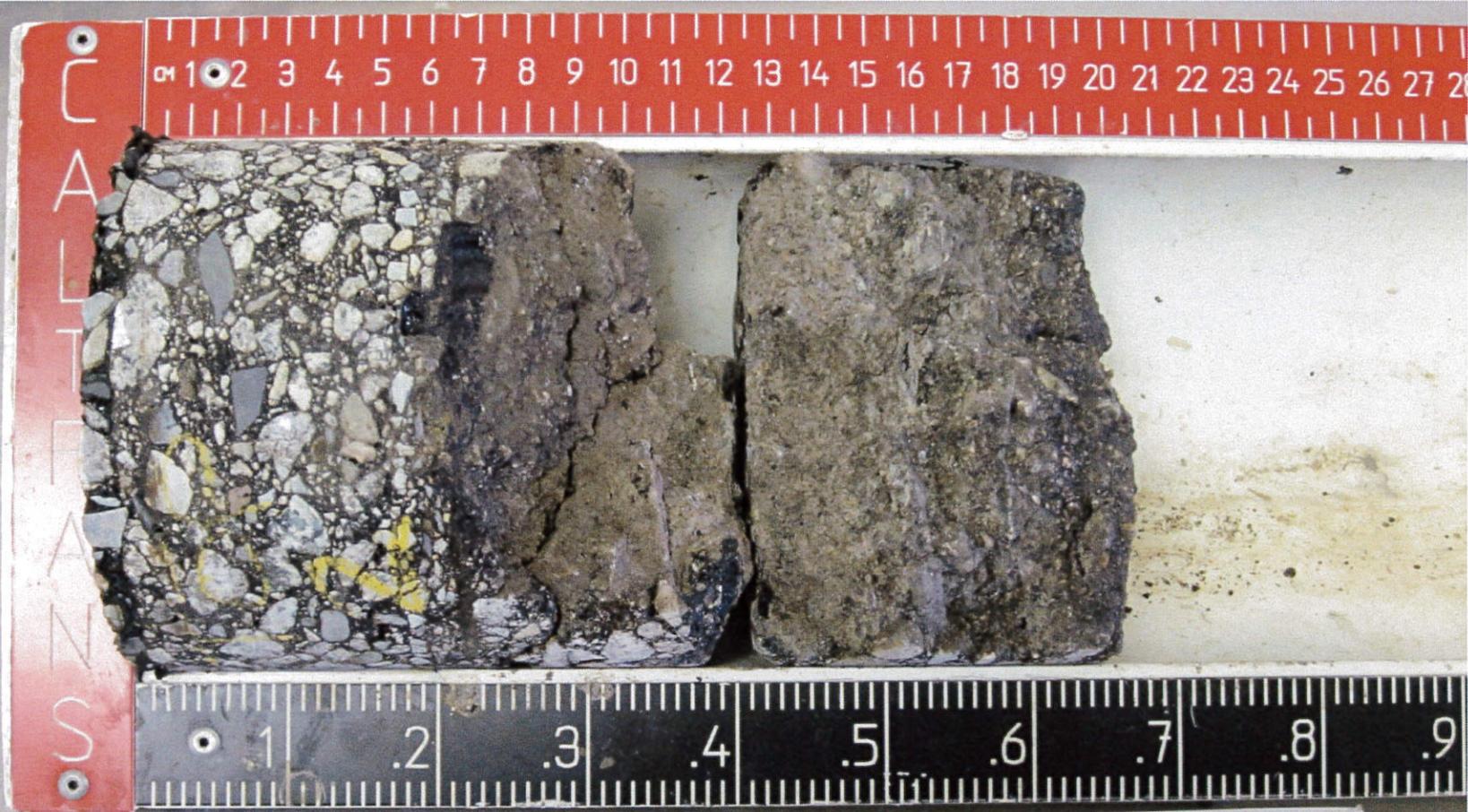
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NB #2 LN
CORE # 1

10/15/2013 09:35

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QUANTITY CALCULATIONS
CAL-ROAD PREP 10/15/2013



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NB #2 LN.
CORE #2

10/15/2013 09:36

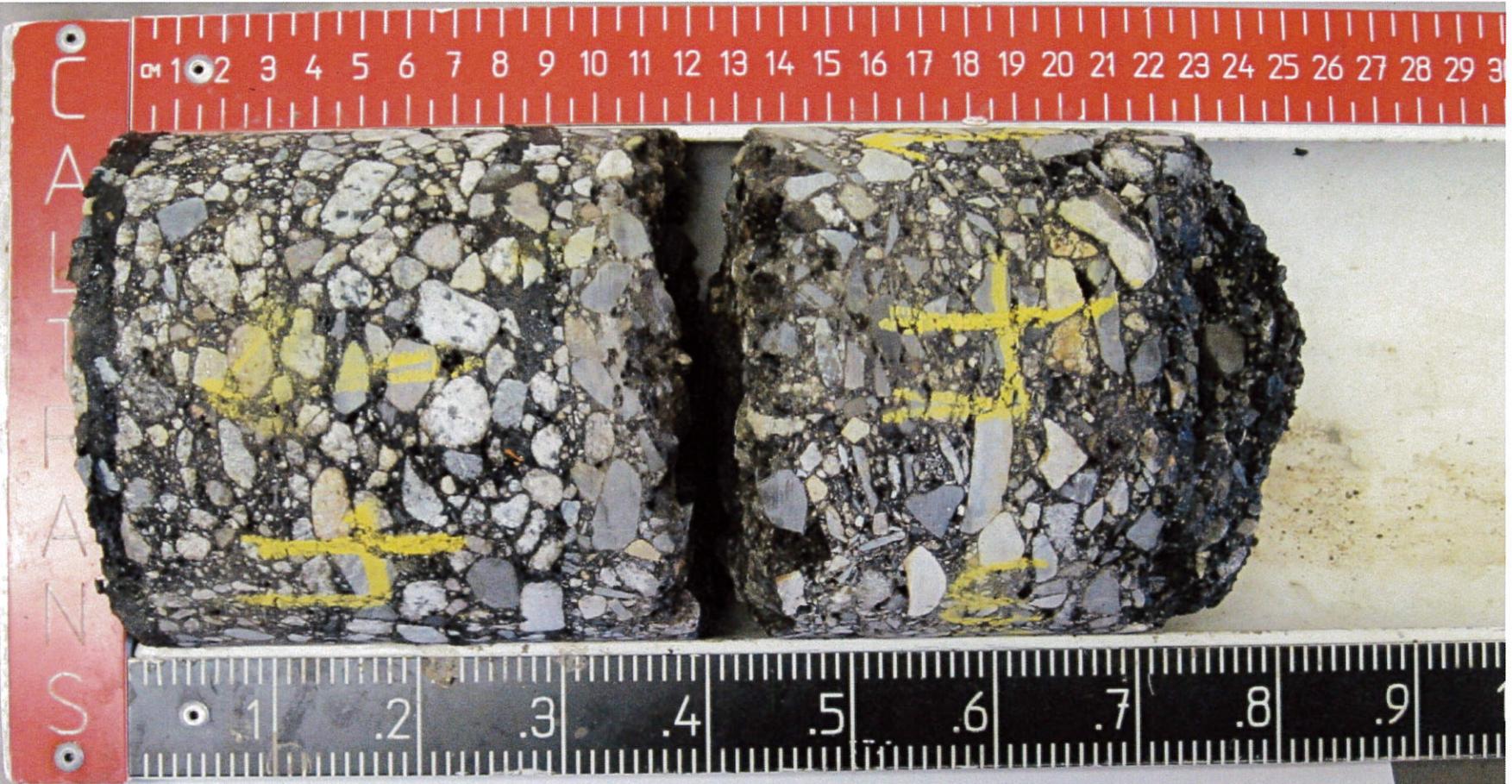
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format@caltrans.ca.gov
format@caltrans.ca.gov



NB #2 LN
CORE #3

10/15/2013 09:37

QUANTITY CALCULATIONS

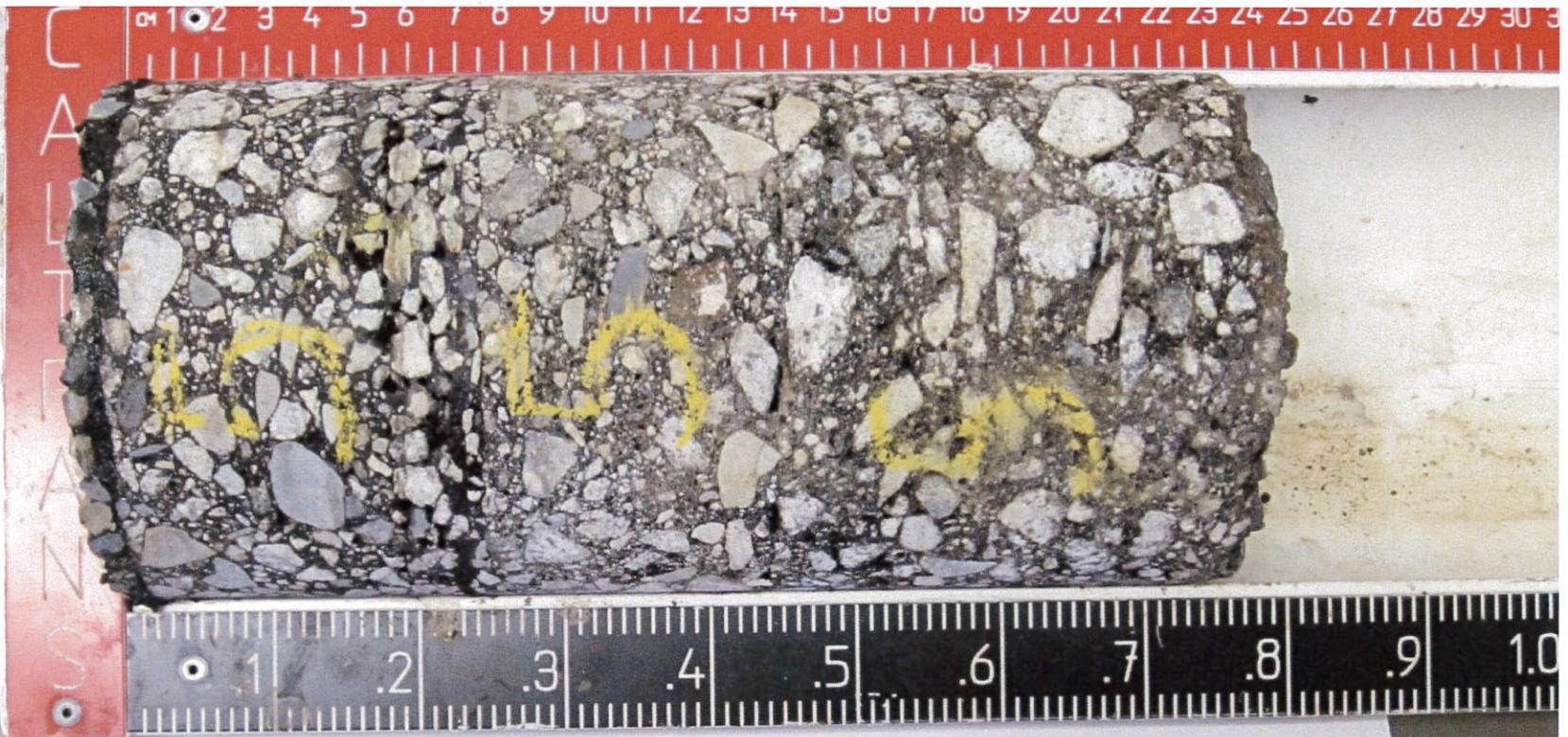


FILE NO.
SEGREGATION YES NO
DATE
DATE

NB #2 LN
CORE #4

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US-89 Sacramento, CA 95834



NB #1 LN
CORE #5

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Management, 1120 N. Street, Sacramento, CA 95814



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

1 .2 .3 .4 .5 .6 .7 .8 .9 1

NB #1 LN
CORE #6

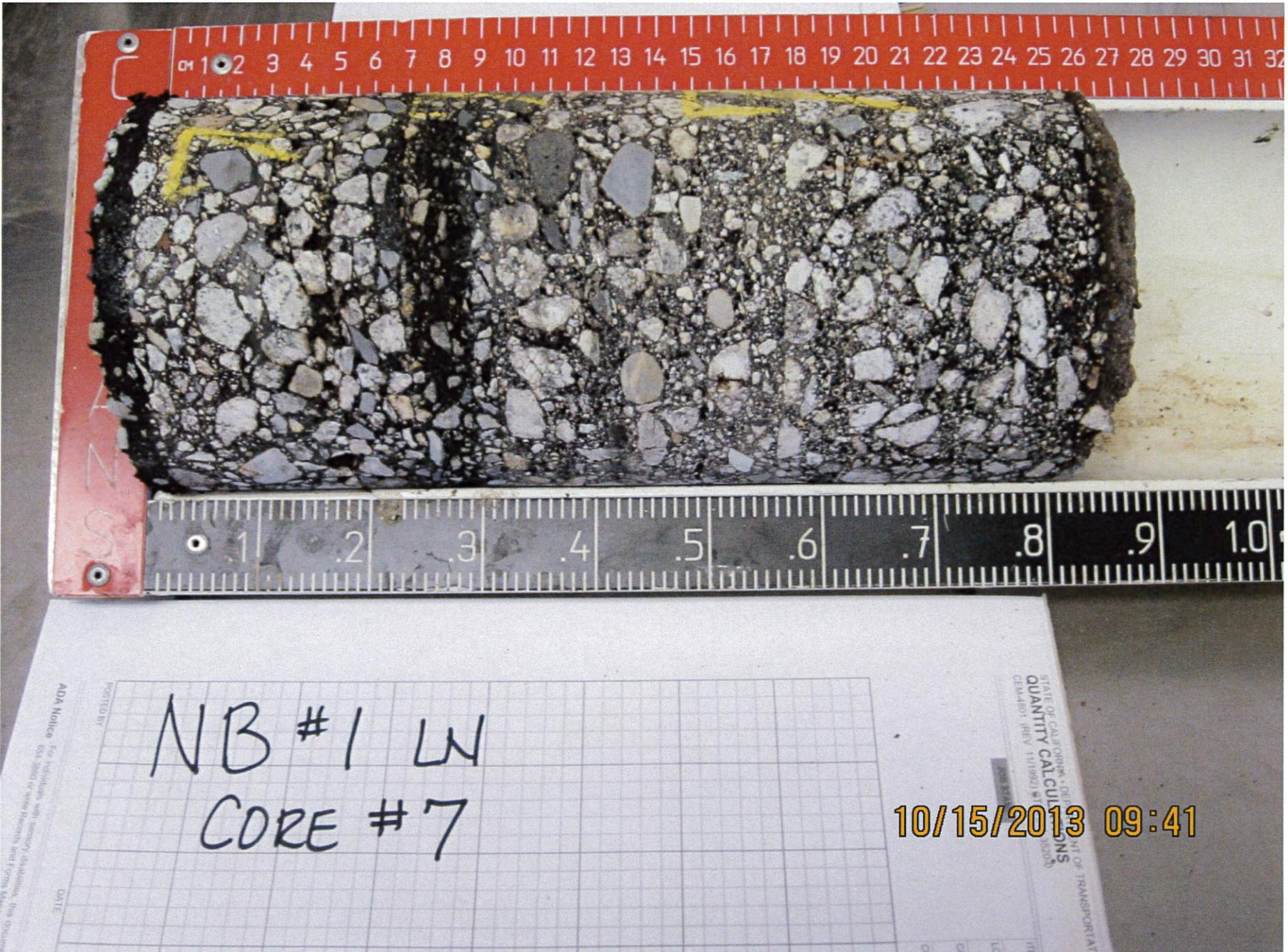
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QUANTITY CALCULATIONS
CEM-4801 (REV. 11/1982) CTR #
ITEM LOCAL CALC CHK





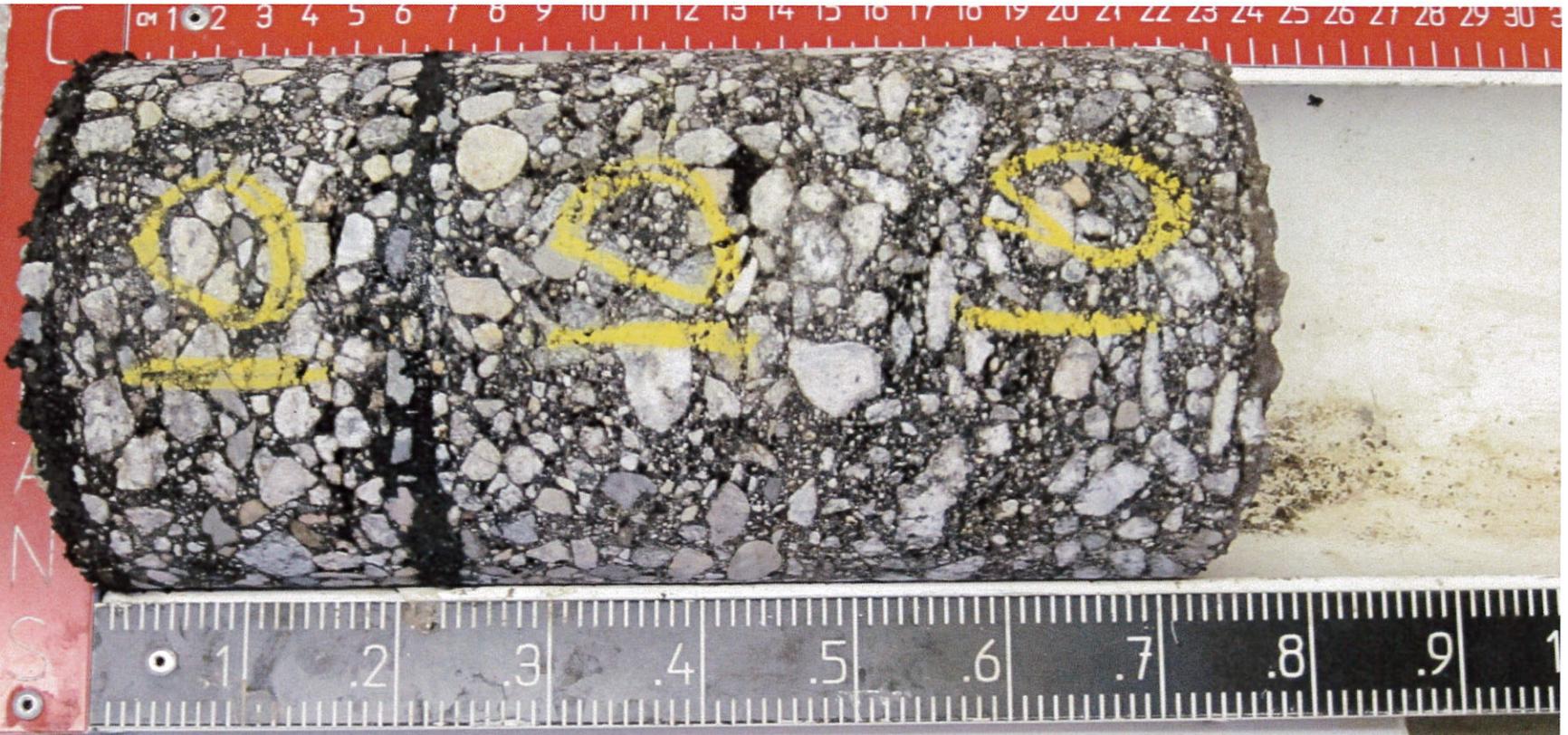
SB #1 LN
CORE #8

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SB #1 LN
CORE #9

10/15/2013 09:43



SB #1 LN
CORE #10

10/15/2013 09:43

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JOB STAMP
ITEM
LOCAT
CALC
CHK

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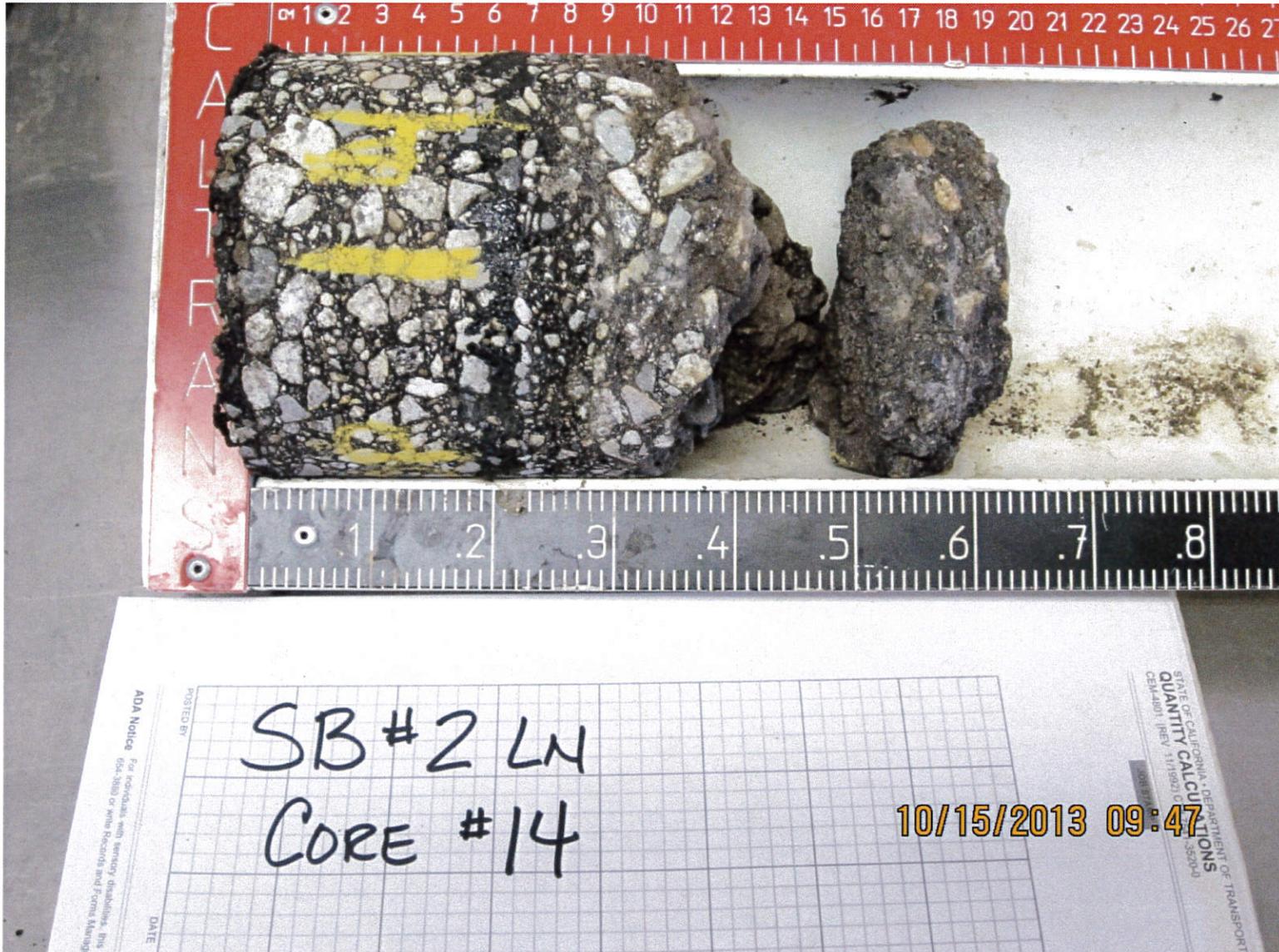
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DATE
DATE

SB #2 LN
CORE #12

10/15/2013 09:45

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e available in alternate form or information call (916) 654-6410 or TDD (916) 654-6414
D N Street, MS-86, Sacramento, CA 95814
CSRS as noted





EXISTING PAVEMENT INFORMATION

ADDENDUM

Right Turn lane at upper Rock Creek Road

Contract Number

09-353101

09-MNO-395

PM 6.9/R9.9

**Cold In-Place Recycling and
Hot Mix Asphalt Overlay**

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Cover Sheet	1
Summary of Investigations	2
Core Pictures	3 - 4

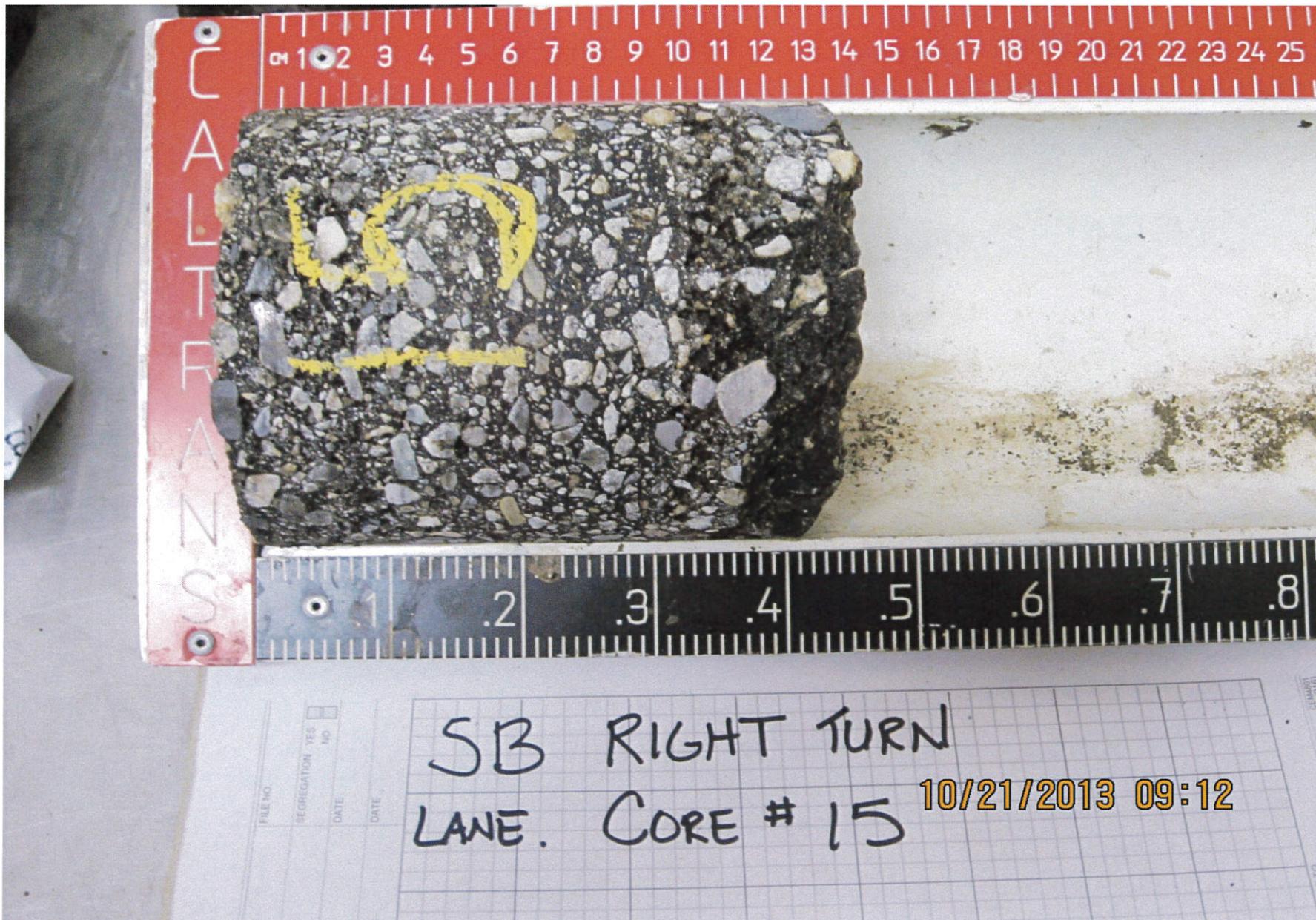
Summary of Investigations

Pavement investigations were conducted on Route 395 from PM 6.9 to PM 10.3 for cold in-place recycling. Cores indicate that the engineering properties of these materials may be improved to provide sufficient strength required to extend the life of this pavement for a few years by recycling the upper portion with asphalt emulsion and capping with hot mix asphalt.

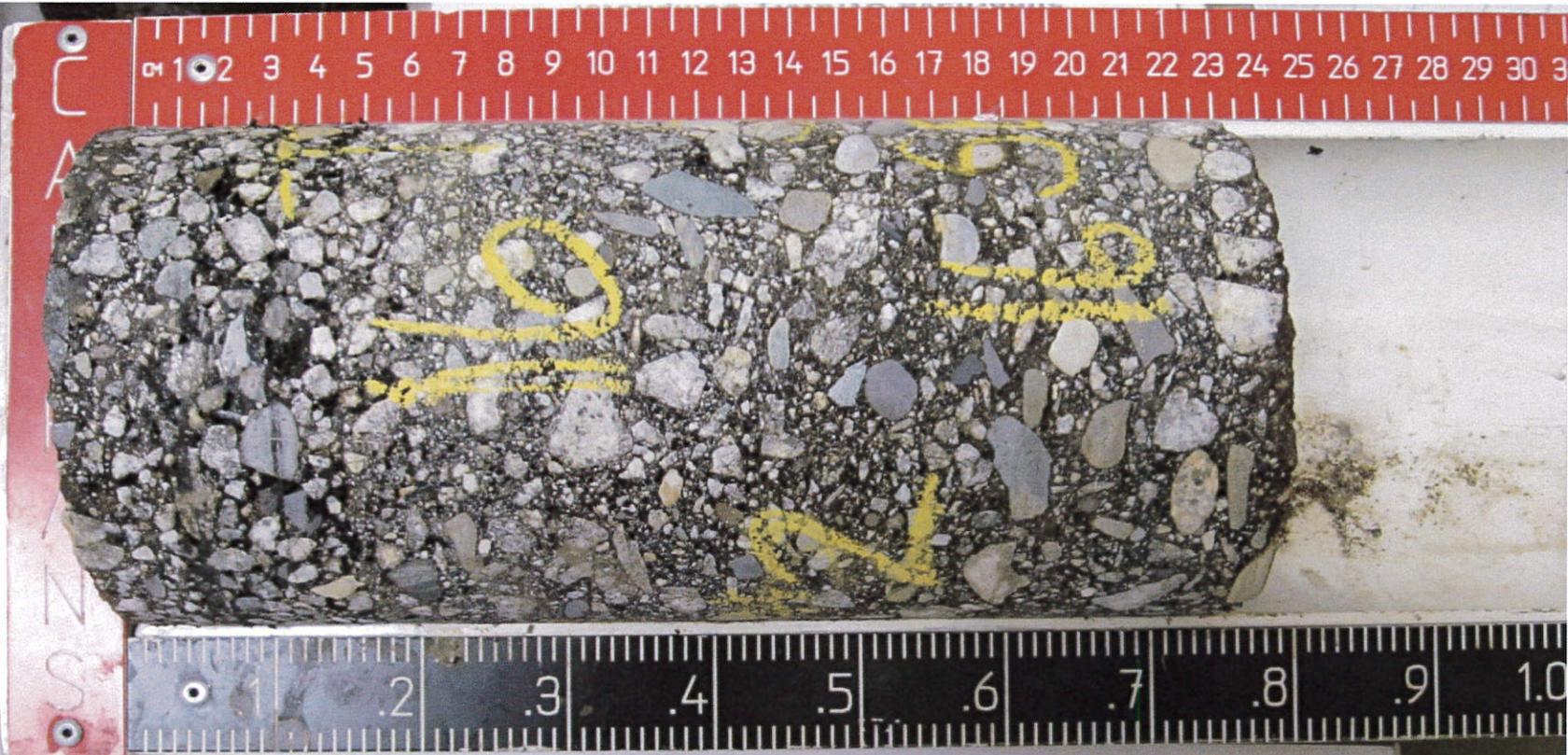
The general structural section is hot mix asphalt over aggregate base. Two cores were taken in the southbound right turn lane at upper Rock Creek Road which indicate a depth of hot mix asphalt that ranges from 0.46 foot (PM 9.35) to 0.80 foot (PM 9.3).

The existing asphalt concrete appears to have some failures, transverse (thermal) and occasional longitudinal cracking.

Any reliance placed by the contractor on this information shall be at their own risk and they shall undertake their own separate testing program to determine the materials present and conditions prevailing at the time of construction.



SB RIGHT TURN
LANE. CORE # 15 10/21/2013 09:12



SB RIGHT TURN
LANE. CORE #16

10/21/2013 09:13

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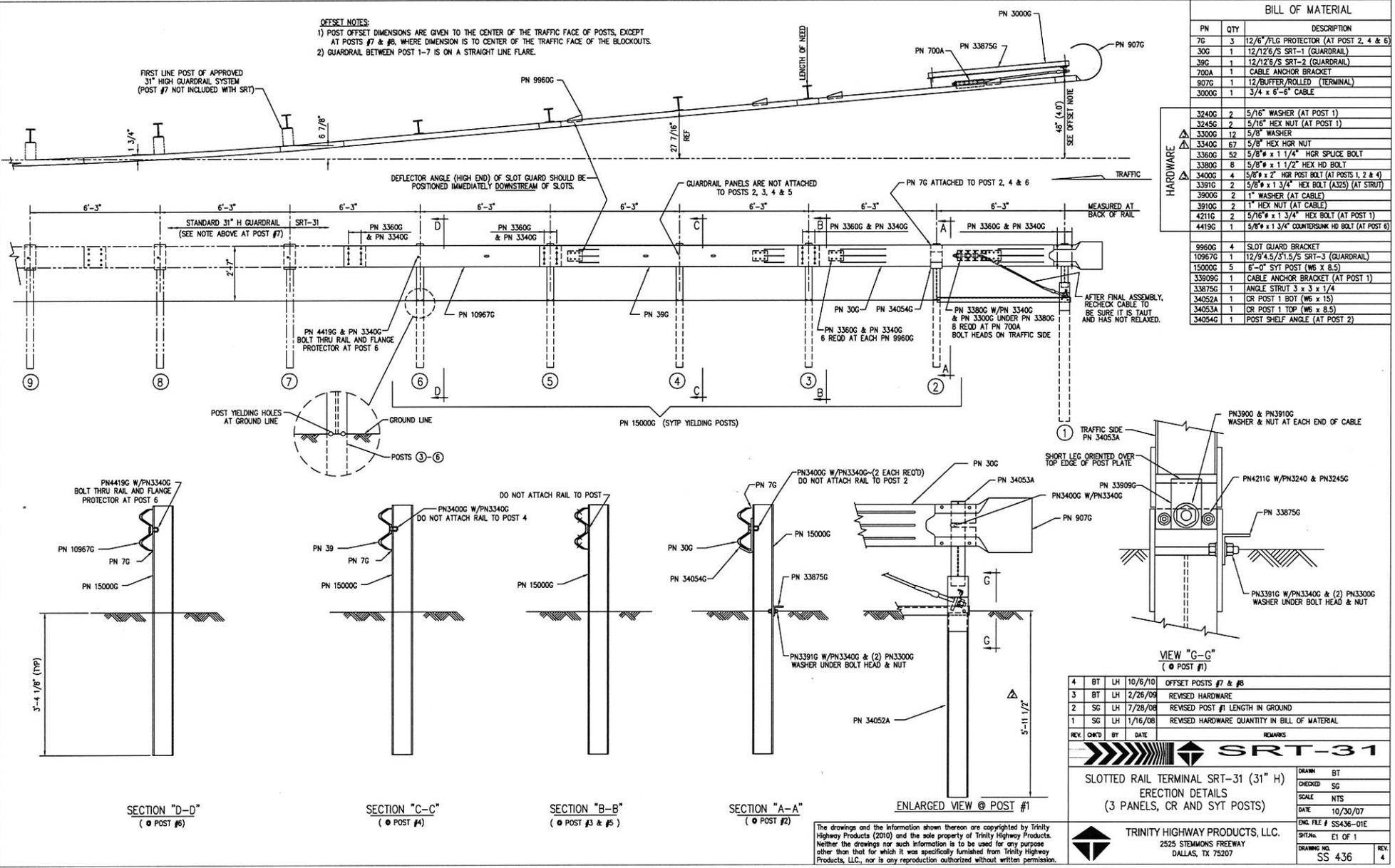
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QUANTITY CALCULATION SHEET
CEM-4801 (REV. 11/1992) CTR 75-10-101
JOB NUMBER
ITEM
LOCAL
CALC
CHK

SECTION 2

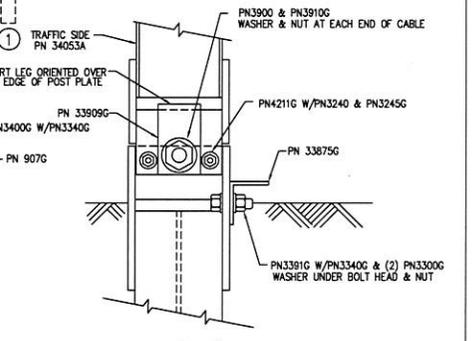
ALTERNATIVE FLARED TERMINAL SYSTEM
DETAILS

OFFSET NOTES:

- 1) POST OFFSET DIMENSIONS ARE GIVEN TO THE CENTER OF THE TRAFFIC FACE OF POSTS, EXCEPT AT POSTS #7 & #8, WHERE DIMENSION IS TO CENTER OF THE TRAFFIC FACE OF THE BLOCKOUTS.
- 2) GUARDRAIL BETWEEN POST 1-7 IS ON A STRAIGHT LINE FLARE.



BILL OF MATERIAL		
PN	QTY	DESCRIPTION
7C	3	12/6" FLG PROTECTOR (AT POST 2, 4 & 6)
30G	1	12/12 5/8 SRT-1 (GUARDRAIL)
39C	1	12/12 5/8 SRT-2 (GUARDRAIL)
700A	1	CABLE ANCHOR BRACKET
907G	1	12/BUFFER/ROLLED (TERMINAL)
3000G	1	3/4 x 6-6" CABLE
HARDWARE		
3240G	2	5/16" WASHER (AT POST 1)
3245G	2	5/16" HEX NUT (AT POST 1)
3300G	12	5/8" WASHER
3340G	67	5/8" HEX HGR NUT
3360G	52	5/8" x 1 1/4" HGR SPLICE BOLT
3380G	8	5/8" x 1 1/2" HEX HD BOLT
3400G	4	5/8" x 2" HGR POST BOLT (AT POSTS 1, 2 & 4)
3391G	2	5/8" x 1 3/4" HEX BOLT (A325) (AT STRUT)
3900G	2	1" WASHER (AT CABLE)
3910C	2	1" HEX NUT (AT CABLE)
4211G	2	5/16" x 1 3/4" HEX BOLT (AT POST 1)
4419G	1	5/8" x 1 3/4" COUNTERSINK HD BOLT (AT POST 6)
9960G	4	SLOT GUARD BRACKET
10967G	1	12/12 5/8 SRT-3 (GUARDRAIL)
15000G	5	6"-0" SYT POST (WG X 8.5)
33909G	1	CABLE ANCHOR BRACKET (AT POST 1)
33675G	1	ANGLE STRUT 3 x 3 x 1/4
34052A	1	CR POST 1 BOT (WG X 15)
34053A	1	CR POST 1 TOP (WG X 8.5)
34054G	1	POST SHELF ANGLE (AT POST 2)



REV.	CHKD	BY	DATE	REMARKS
4	BT	LH	10/6/10	OFFSET POSTS #7 & #8
3	BT	LH	2/26/09	REVISED HARDWARE
2	SG	LH	7/28/08	REVISED POST #1 LENGTH IN GROUND
1	SG	LH	1/16/08	REVISED HARDWARE QUANTITY IN BILL OF MATERIAL

SRT-31

SLOTTED RAIL TERMINAL SRT-31 (31" H)
ERECTION DETAILS
(3 PANELS, CR AND SYT POSTS)

<p>DRAWN BT</p> <p>CHECKED SG</p> <p>SCALE NTS</p> <p>DATE 10/30/07</p> <p>ENG FILE # SS436-01E</p> <p>SHTNG E1 OF 1</p> <p>DRAWING NO. SS 436</p>	<p>TRINITY HIGHWAY PRODUCTS, LLC.</p> <p>2525 STEMMONS FREEWAY</p> <p>DALLAS, TX 75207</p>	<p>REV. 4</p>
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SECTION "D-D"
(@ POST #6)

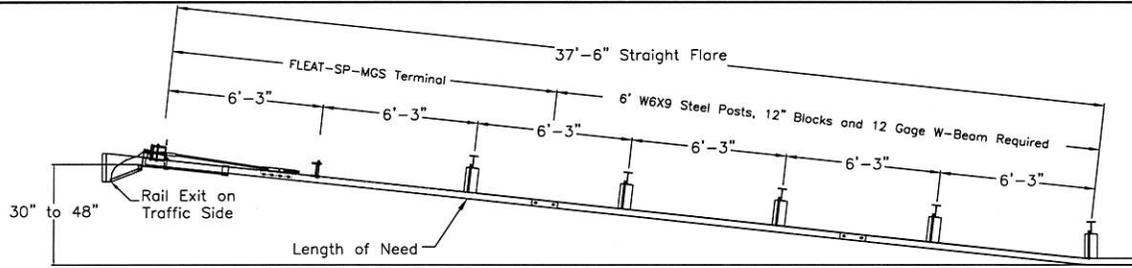
SECTION "C-C"
(@ POST #4)

SECTION "B-B"
(@ POST #3 & #5)

SECTION "A-A"
(@ POST #2)

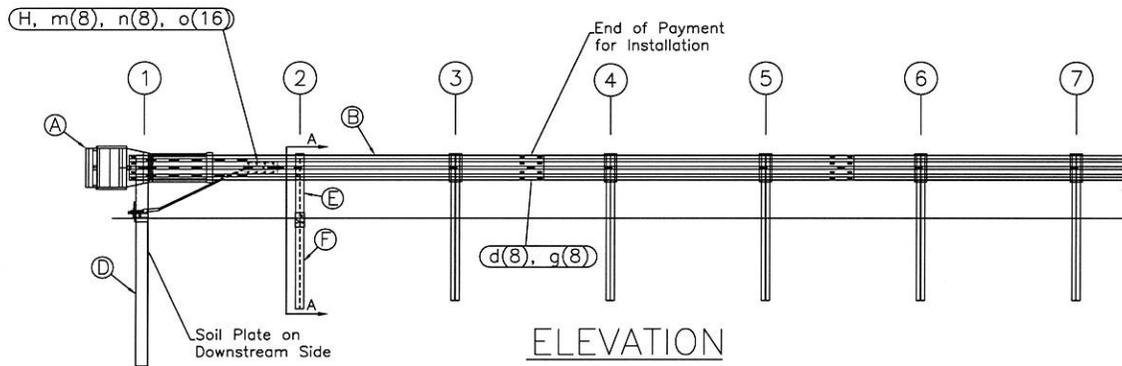
ENLARGED VIEW @ POST #1

VIEW "G-G"
(@ POST #1)

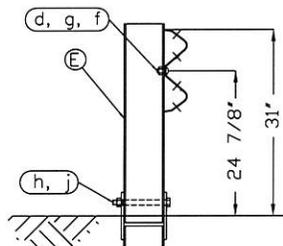


PLAN

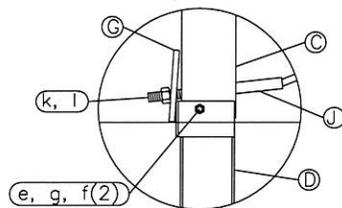
TRAFFIC →



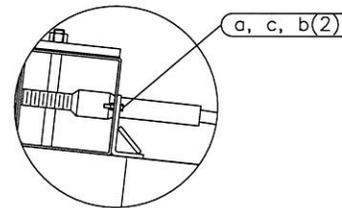
ELEVATION



SECTION A-A
Post #2



Post #1 Connection Detail



Impact Head Connection Detail

ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	F3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 Ga.	MGS-SF1303
C	1	FIRST POST TOP (6X6X $\frac{1}{2}$ " Tube)	TPHP1A
D	1	FIRST POST BOTTOM (6' W6X15)	TPHP1B
E	1	SECOND POST ASSEMBLY TOP	UHP2A
F	1	SECOND POST ASSEMBLY BOTTOM	HP3B
G	1	BEARING PLATE	E750
H	1	CABLE ANCHOR BOX	S760
J	1	BCT CABLE ANCHOR ASSEMBLY	E770
HARDWARE (ALL DIMENSIONS IN INCHES)			
a	2	5/16 x 1 HEX BOLT GRD 5	B5160104A
b	4	5/16 WASHER	W0516
c	2	5/16 HEX NUT	N0516
d	9	5/8 Dia. x 1 1/4 SPLICE BOLT (POST #2)	B580122
e	1	5/8 Dia. x 9 HEX BOLT GRD 5	B580904A
f	3	5/8 WASHER	W050
g	10	5/8 Dia. H.G.R NUT	N050
h	1	3/4 Dia. x 8 1/2 HEX BOLT GRD A449	B340B54A
j	1	3/4 Dia. HEX NUT	N030
k	2	1 ANCHOR CABLE HEX NUT	N100
l	2	1 ANCHOR CABLE WASHER	W100
m	8	CABLE ANCHOR BOX SHOULDER BOLT	SB58A
n	8	1/2 A325 STRUCTURAL NUT	N055A
o	16	1 1/16 OD x 9/16 ID A325 STR. WASHER	W050A

GENERAL NOTES:

- All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
- The lower sections of the Posts 1&2 shall not protrude more than 4 in. above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
- The lower sections of the hinged posts should not be driven with the upper post attached. If the post is placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
- When competent rock is encountered, a 12" \varnothing post hole, 20 in. deep cored into the rock surface may be used if approved by the engineer for post 1. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first post can be field cut to length, placed in the hole and backfilled with suitable backfill. The soil plate may be trimmed if required.
- The breakaway cable assembly must be taut. A locking device (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening nuts.

RSI
Road Systems, Inc.
Big Spring, TX
Phone: 432-263-2435
or Phone: 330-346-0721

FLEAT-SP-MGS Terminal Midwest Guardrail System 31" Top of Rail		Sheet: 1
		Date: 02/24/10
		By: JRR
		Rev: 0
Drawing Name: FLT-SP-S-MGS	Scale: None	