INFORMATION HANDOUT

For Contract No. 11-237964
At 11-SD-8-5.4/10.6, R20.0/R21.6

Identified by
Project ID 1114000046

MATERIALS INFORMATION

1. Water source information, City of San Diego, dated March 11, 2016
2. Structural Sections Recommendations-Revised, dated October 21, 2015
3. Site Investigation Report, dated March 26, 1999
4. Aerial Lead Investigation Report, dated February 22, 1999
5. Cable Lacing
6. Automatic Traffic Counter and Piezoelectric Sensor Connector
7. Cable Verification Worksheet
8. Link Loss Budget Worksheet
9. Fiber Optic Trench Location
10. Existing Cabinets

THE CITY OF SAN DIEGO

March 11, 2016

Ms. Cynthia Hoffman
Project Engineer
Department of Transportation District 11
4050 Taylor Street
San Diego, CA 92110

Dear Ms. Hoffman:

Subject: Water Availability Request for Caltrans Project on I-8 (EA/Contract No. 11- 237961)

This is in response to your email on October 8, 2015 regarding water availability for the above subject project. Based upon the volume and duration of the project you provided, the City of San Diego has sufficient and available potable water capacity to serve your project.

Please note that effective July 1, 2014, the City of San Diego moved to Level 1 Drought Alert per the attached memo dated June 24, 2014 (see attachment 1). The Level 1 Drought Watch Condition lists voluntary water conservation measures that are added to the City's existing permanent restrictions. Additionally, effective November 1, 2014, the City of San Diego enacted a Drought Alert status, the second phase of citywide conservation that calls for mandatory water use restrictions in response to the severe drought conditions statewide (see attachment 2). In addition to all the conservation measures, on June 1, 2015, San Diego was required by the State of California to cut water use by another 16%.

Please also note that utilizing existing potable water and/or irrigation meters City-wide will be subject to any City of San Diego City Council drought actions to conserve water, if enacted by City Council.

If you have any questions, please call me at 619-446-5420 or email me at Mrastakhiz@sandiego.gov.

Sincerely,

Mehdi Rastakhiz, PE
Associate Civil Engineer
Development Services Department
Water and Sewer Development Review
1222 First Avenue, MS 401
San Diego, CA 92101

Attachment 1: Level 1 Drought Alert memo dated June 24, 2014
Attachment 2: Drought Alert status, the second phase of citywide mandatory water use restrictions Dated, October 21, 2014

THE CITY OF SAN DIEGO

MEMORANDUM

DATE: June 24, 2014

TO: All Department Directors

FROM: Halla Razak, Director of Public Utilities

SUBJECT: Level 1 Drought Alert starting July 1, 2014

The City of San Diego was in a Stage 2 Drought Alert Condition from June 1, 2009, through May 26, 2011. During that time, City departments played a vital role in saving water and setting a good example for the citizens in our community. During the height of that drought, City departments reduced metered water consumption by 31.4% from pre-drought levels.

The City Council recently approved moving the City to a Level 1 Drought Watch Condition starting July 1, 2014. This memo is provided to assist Departments in identifying water saving opportunities, creating water conservation plans and complying with permanent and voluntary water use regulations.

PRIOR WATER CONSERVATION EFFORTS

From 1992 to 1999, the Water Department implemented a City Facilities Retrofit Program that installed more than 2,384 ultra-low flush toilets and 702 urinals in 494 City owned and operated facilities. The City wanted to show its commitment to water conservation by installing the water conserving plumbing fixtures in our own facilities. That program was completed in 1999 and the biggest retrofit job, that of Qualcomm Stadium in 1998 (365 toilets and 196 urinals) in time for Super Bowl XXXII, was used in a national water conservation publication/article.

The Public Utilities Department has also worked for many years with the Park and Recreation Department to create water use budgets for City parks. Water budgets are estimates of how much water existing landscapes need based on weather information, plant watering needs, type of soil and irrigation systems used, and these estimates are translated into run times per irrigation valve to allow them to use water efficiently. Throughout the last drought, Park and Recreation staff closely monitored water consumption in all its irrigated areas, and this diligence was evident in the achieved 31% water use reduction.

PERMANENT WATER USE RESTRICTIONS

Before the City lifted Level 2 mandatory restrictions in 2011, City Council and City staff agreed that some of these restrictions should remain in place. Hence the San Diego Municipal Code Section SDMC §67.3803 was revised to reflect the permanent water use restrictions that are in effect every day in San Diego. These include the following limitations:

a) No runoff/excessive irrigation leaving the property;
b) Repair leaks upon discovery or within seventy-two hours of notification;
c) No watering of paved areas;
d) No overfilling swimming pools and spas;
e) No non-recirculating decorative water fountains;
f) Car washing only in a commercial car wash or using a hose with shutoff nozzle or a bucket;
g) New buildings must recycle cooling system water and car wash water;
h) Restaurants will only serve and refill water upon request;
i) Hotel guests must have the option of not laundering towels and linens daily; and
j) No watering after 10 am and before 4 pm (winter)/before 6 pm (summer).

Please ensure that staff within your Department is aware of these permanent water use restrictions.

VOLUNTARY WATER USE RESTRICTIONS

The Level 1 Drought Watch Condition lists voluntary water conservation measures that are added to the City's existing permanent water restrictions. These voluntary measures go into effect on July 1, 2014. Although these measures are voluntary for citizens, it is advised that City Departments take the lead and treat them as mandatory:

1) Landscape irrigation limited to three days per week;
2) When watering without an irrigation system a shut-off nozzle or garden hose sprinkler system on a timer is required;
3) Washing vehicles limited to the same schedule as irrigation (except for: boats which may be washed after use; vehicles with health/safety issues; at a commercial carwash that recycles water);
4) Use recycled or non-potable water for construction purposes;

5) Fire hydrants for firefighting only;

6) Construction operations can use water only as required by regulatory agencies; and

7) Irrigation is not permitted during rain event.

RECOMMENDED CONSERVATION MEASURES

Indoor Water Use

If the facility is one of those that received water conserving plumbing fixtures through the City Facilities Retrofit Program, City staff can inspect these fixtures for proper operation and leaks. Self-closing faucets should shut off after a determined amount of seconds. Make sure the valves are not sticking, which would prevent the faucet from shutting off automatically. If faucet aerators have been removed, install new ones that use 1.0 gallons per minute. If the facility has tank style toilets, place dye tablets or food coloring inside the tank and observe if the coloring makes it way to the bowl. This would indicate a leak and would require an adjustment or replacement of the toilet flapper mechanism. Always repair leaks, as even small ones can waste hundreds of gallons of water.

If the facility still has high volume plumbing fixtures, replace them with water efficient ones, such as high-efficiency toilets and urinals, and faucets with self-closing features. There may be some incentives available for replacing these older fixtures. Check with the Water Conservation Program (Luis Generoso at 619-533-5258) for up-to-date information on incentives for public facilities.

Here are a few other measures City staff can take:

- Increase employee awareness of the need to conserve water. The Water Conservation Program (contact Luis Generoso at 619-533-5258) has various brochures and reference materials that can help you.
- Install signs encouraging water conservation in employee and customer restrooms.
- Assign an employee to monitor water use and waste within the facility. Read your water meter weekly to monitor the success of your water conservation efforts, and to detect leaks. Monitor water usage when reviewing water bills. Information on your historic water usage can be obtained calling our Water Conservation Program.
- Check for obvious leaks, where there are consistent water puddles.
- Repair dripping faucets and showers, and continuously running toilets.
- Install faucet aerators where possible.
- Shut off water supply to equipment rooms not in use.
- Shut off cooling equipment when not in use, and minimize water used in cooling units. There may be a need to replace the cooling tower conductivity controller. Check for incentives offered for these controllers.
- Review rebates available in Southern California at http://www.bewaterwise.com .

If there are other function areas like cafeterias/food preparation areas, please contact our Water Conservation Program for tips on how to conserve water specific to those areas.

Outdoor Consumption

Significant water savings can be realized if attention is given to how much water we use outdoors. Here are things City staff can readily implement to help reduce outdoor water consumption:

- Stop hosing down sidewalks, driveways and parking lots. If you need to do so for health and safety reasons, consider using a water broom or a water efficient power washer. For more information, visit our website at www.sandiego.gov/water/conservation.
- Operate your irrigation system to water before 10 a.m. or after 6:00 p.m. to minimize water loss from evaporation or windy conditions.
- Water landscape only when needed. Usually two to three times a week is sufficient. Or you can use the Landscape Watering Calculator at the website mentioned above to prepare a water efficient irrigation schedule based on your plants watering needs, weather date, soil type, and irrigation system used. This easy-to-use tool developed by the Public Utilities Department has been recognized with multiple awards, and is endorsed by a number of landscape industry professionals.
- Consider installing a weather based irrigation controller. These "smart controllers" automatically adjust irrigation run times as the season/weather changes and can shut off your system when it rains. Check with our Water Conservation Program for incentives that may be available.
- Make sure your sprinklers irrigate only the landscape area and not driveways and parking lots. Avoid irrigation runoff that causes storm water pollution.
- Do not water on windy days.
- Should landscape conversion be an option, consider water efficient plants and irrigation systems. These plants provide color and beauty, and the plant choices are numerous. Check our website or visit the Water Conservation Garden at Cuyamaca College (www.thegarden.org) for more information. Rebates for landscape and irrigation system conversions are also available.

More information on how you can save water at home and at work can be found on the following websites:

City of San Diego
http://www.WasteNoWater.org

San Diego County Water Authority
http://www.sdcwa.org/whenindrought

Metropolitan Water District of Southern California
http://www.bewaterwise.com/

RECYCLED WATER OPTION

If the facility is located along the existing recycled water pipeline route you might consider retrofitting your irrigation system to accept recycled water. Irrigation retrofit rebates are now available under a Metropolitan Water District pilot program. For an interactive "recycled water availability zone map" visit http://www.sandiego.gov/water/recycled/availability/index.shtml or contact Dawnn Jackson at 619-533-4264.

Thank you for the cooperation in conserving water at City facilities and for providing a good example to the public. Please let me know if you should have any questions.

Halla Razak
Director of Public Utilities

LSG/lsg

THE CITY OF SAN DIEGO
PUBLIC UTILITIES

FOR IMMEDIATE RELEASE
October 21, 2014

MEDIA CONTACT:
Robyn Bullard, Senior Public Information Officer
(858) 614-5715

City Enters Drought Alert Status

New Mandatory Water Use Restrictions Go Into Effect Nov. 1

SAN DIEGO – At the recommendation of Mayor Kevin L. Faulconer, the City Council voted Monday to enact a Drought Alert status, the second phase of citywide conservation that calls for mandatory water use restrictions to begin Nov. 1 in response to the severe drought conditions statewide.

"Working together as a community, San Diego has done a tremendous job in the past in responding to the call for water conservation," Mayor Faulconer said. "For that, we say thank you, and now we must ask for your continued help as we face the uncertainty of future rainfall and water supplies at critical levels."

The City implemented its voluntary Drought Watch stage on July 1, 2014. Earlier this month, Mayor Faulconer recommended moving to the next level of water conservation based on several factors, including a significant decline in ground water reserves throughout California, a drop in water reservoirs for the San Diego region, a lack of rainfall and diminished prospects for a strong El Niño, and a severe heat wave for the San Diego region in August and September.

The Drought Alert stage doesn't contain a sunset clause and will stay in effect as long as the City deems necessary.

Relevant to most residents under the Drought Alert stage are the restrictions that mandate assigned watering days, which are dependent on your address. There are also restrictions on what time of day residents can water and how long they can water:

Assigned Watering Days

Residences with odd-numbered addresses	Water only on Sundays, Tuesdays & Thursdays
Residences with even-numbered addresses	Water only on Saturdays, Mondays & Wednesdays
Apartments, condos & businesses	Water only on Mondays, Wednesdays & Fridays

Time of Day and Time Limits

- From November 1 through May 31, water only between 4 p.m. and 10 a.m. for only 7 minutes at each station when using a standard sprinkler system.
- From June 1 through October 31, water only between 6 p.m. and 10 a.m. for only 10 minutes at each station when using a standard sprinkler system.

Other water use restrictions that become effective under Drought Alert status are:

- Use a hand-held hose equipped with a positive shut-off nozzle or timed sprinkler system to water landscaped areas.
- Stop operation of ornamental fountains, except to the extent needed for maintenance purposes.
- The washing of automobiles, trucks, trailers, airplanes and other types of transportation equipment is only allowed during the following times:

  - Between 4 p.m. and 10 a.m. from November 1 to May 31.

  - Between 6 p.m. and 10 a.m. from June 1 through October 31.
- Washing is permitted at any time at a commercial car wash.
- No irrigation is allowed during rain events.
- Potted plants, non-commercial vegetable gardens and fruit trees may be irrigated on any day during the following times:

  - Between 4 p.m. and 10 a.m. from November 1 through May 31

  - Between 6 p.m. and 10 a.m. from June 1 through October 31.
- Irrigation is permitted any day at any time as follows:

  - As required by a landscape permit.

  - For erosion control.

  - For establishment, repair or renovation of public use fields for schools and parks.

  - For landscape establishment following a disaster.
- Use recycled or non-potable water for construction purposes when available.
- Use of water from fire hydrants will be limited to firefighting, meter installation by the Water Department or other activities necessary to maintain the health, safety and welfare of San Diegans.

- Constructions operations receiving water from a fire hydrant or water truck will not use water beyond normal activities.

These restrictions are in addition to permanent, mandatory water use restrictions in effect at all times since 2011. For a list of all current restrictions, as well as conservation resources, rebate programs and other valuable information, visit www.wastenowater.org.

The City of San Diego's Water Conservation Program reduces water demand through promoting or providing incentives for the installation of hardware that provides permanent water savings, and by providing services and information to help San Diegans make better decisions about water use. For more information about Water Conservation, visit www.wastenowater.org or call (619) 515-3500.

Craig Gustafson
Press Secretary & Director of Media Relations

Mayor Kevin L. Faulconer
City of San Diego

Mobile: 619.453.9880
Office: 619.236.7064
Fax: 619-236-7228
www.sandiego.gov/mayor

Disclosure: This email is public information. Correspondence to and from this email address is recorded and may be viewed by third parties and the public upon request.

State of California

Business, Transportation and Housing Agency

Memorandum

To : CYNTHIA HOFFMAN (MS 340)
Project Engineer
Design

Date: October 21, 2015

File: 11-SD-8
PM 5.4/10.6, R20.0/R21.8
EA 11-237961
EFIS 1114000046

From : **DEPARTMENT OF TRANSPORTATION - DISTRICT 11**
PAVEMENT ENGINEERING SECTION

Subject: **STRUCTURAL SECTION RECOMMENDATIONS - Revised**

The Post Mile limits of this project have been revised. The recommendations have been revised to include an RHMA-G alternative. Due to constructability, MVPs are not typically not constructed with RHMA-G.

Per your request, the structural section alternatives for the MVPs on SD-8 are provided.

Maintenance Vehicle Pullout & CHP Pad

Alternate 1	Alternate 2
0.30' HMA – A	0.15' RHMA-G
1.00' AB – Class 2	0.15' HMA-A
	1.00' AB – Class 2

Design Note

For HMA-A and RHMA-G lifts between 0.15 ft. and 0.20 ft., the recommended aggregate grading is 1/2 in. maximum graduation. For HMA-A and RHMA-G lifts greater than 0.20 ft., the recommended aggregate grading 3/4 in. maximum graduation.

If you have questions with regards to this memorandum, please contact me at 858-467-4056 or cell 619-954-8568.

David Evans
District Pavement Engineer
District 11 Materials Engineering

REGISTERED PROFESSIONAL ENGINEER
DAVID S. EVANS
No. C48245
Exp 6-30-16
CIVIL
STATE OF CALIFORNIA

Ref: 8.237961.ss3.doc

Rte 8 KP 9.0 - 12.7
PM 5.4 - 7.62

GEOCON

GEOTECHNICAL
&
ENVIRONMENTAL
CONSULTANTS

SITE INVESTIGATION REPORT

LEAD INVESTIGATION ON ROUTE 8, FROM THE 8/15 SEPARATION TO 0.6 KM WEST OF COLLEGE AVENUE OVERCROSSING IN SAN DIEGO, CALIFORNIA

CONTRACT 43A0012
TASK ORDER NO. 11-2264U1-PF
EA 230900

PREPARED BY

GEOCON ENVIRONMENTAL CONSULTANTS, INC.
6970 FLANDERS DRIVE
SAN DIEGO, CALIFORNIA 92121
Tel. 619.558.6100
Fax. 619.558.8437
email: environmental@geoconinc.com

PREPARED FOR

CALIFORNIA DEPARTMENT
OF TRANSPORTATION
DISTRICT 11
SAN DIEGO, CALIFORNIA

MARCH 1999

I. EXECUTIVE SUMMARY

Pursuant to the California Department of Transportation (Caltrans) Contract No. 43A0012 and Task Order (TO) No 11-2264U1-PF, EA 230900, Geocon Environmental Consultants, Inc. (Geocon) has performed a site investigation on the unpaved portions of the eastbound shoulder of Route 8 from the 8/15 separation to 0.6 km west of College Avenue in San Diego, California. Caltrans proposes to perform erosion control on the shoulder of Route 8. The investigation was performed to evaluate the presence of lead due to the historical combustion of leaded fuels from freeway traffic. Data from the investigation was used to determine the re-use method for soil excavated at the site during the proposed construction, and to inform Caltrans of potential health and safety issues concerning the presence of lead in soil for workers at the site during construction activities. The soil samples collected were analyzed for total lead, four soil samples were analyzed for pH, 22 soil samples were analyzed using the WET with citric acid, and six soil samples were analyzed using the WET with deionized water. Of the 22 boring locations advanced, eight borings were advanced as step-out borings from the edge of the roadway.

Statistical analysis using the upper confidence levels {UCL} of 80 % and 95% and the laboratory data indicated soil along the shoulder of the roadway to the total depth of the borings advanced contained soluble lead concentrations greater than 5.0 mg/l. Data from the step-out borings were not included in the statistical analysis. However, two of the step-out borings contained soluble lead concentrations above 5.0 mg/l. The average soluble lead WET-DI results were above 0.5 mg/l.

i.i. Conclusions

The laboratory results, statistical analysis performed using the 80% and 95% UCL, and Title 22 of the California Code of Regulations (CCR) indicated that soil along the shoulder of the roadway at the site has the potential to be classified as a hazardous waste. Due to the unavailability of data below 0.3 meters, soil excavated to a depth of 0.6 meters is assumed to contain hazardous concentrations of lead. Soil in step-out borings B14B and B14C to a depth of 0.15 feet is assumed to contain hazardous concentrations of lead. Soil from the remaining step-out borings contains non-hazardous concentrations of lead.

i.ii. Recommendations

It is recommended that if the upper 0.6 meters of soil excavated is to be re-used on-site, it should be placed under pavement at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil is to be exported to another Caltrans right-of-way location, it should be re-used in the same manner as described above. Should the soil excavated to a depth of 0.6 meters at the site require disposal, it should be disposed as a hazardous waste with regard to lead concentrations. Soil excavated from the vicinity of step-out borings B14B and B14C to a depth of approximately 0.15 meters should be handled in the same manner as described above. Soil excavated from the vicinity of borings B10B, B10C, B12B, B12C, B14D, and B14E may be re-used on-site, at another Caltrans location, or disposed of as non-hazardous with respect to lead impacts.

It is further recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR HIGHWAY EROSION CONTROL ON

STATE HIGHWAY

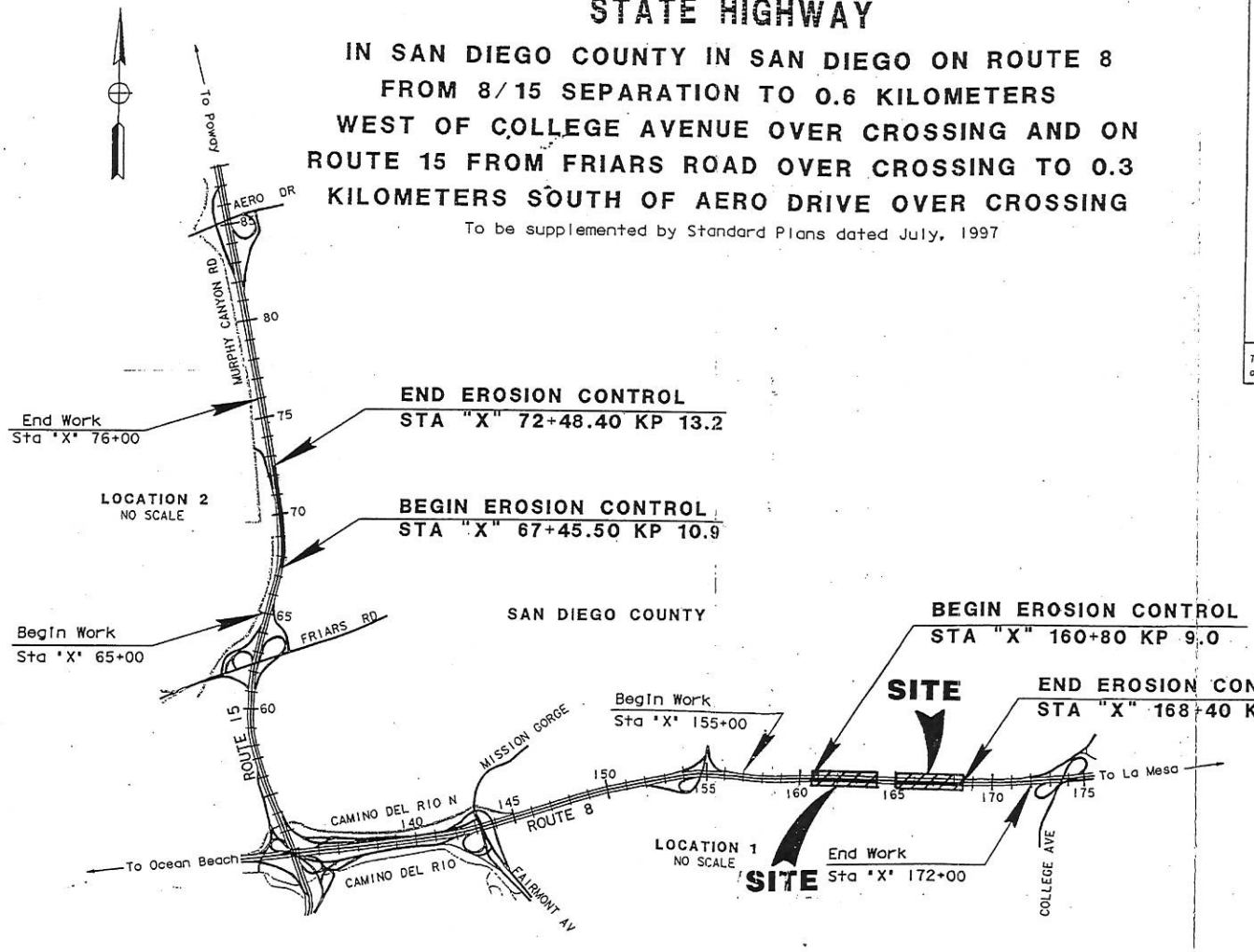
IN SAN DIEGO COUNTY IN SAN DIEGO ON ROUTE 8 FROM 8/15 SEPARATION TO 0.6 KILOMETERS WEST OF COLLEGE AVENUE OVER CROSSING AND ON ROUTE 15 FROM FRIARS ROAD OVER CROSSING TO 0.3 KILOMETERS SOUTH OF AERO DRIVE OVER CROSSING

To be supplemented by Standard Plans dated July, 1997

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEET
11	SD	8, 15	R9.0, R12.7 10.9/13.2	1	

LOCATION MAP

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet



SITE PLAN
ROUTE 8 BETWEEN FAIRMONT AVE.
AND COLLEGE AVE.
SAN DIEGO, CALIFORNIA

GEOCON
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 619 558-6900 - FAX 619 558-6157

SCALE	DATE 3-26-99
PROJECT NO. 08900 - 06 - 07	FIGURE 1
SHEET OF	

Licensed Landscape Architect

LICENSED LANDSCAPE ARCHITECT
Michael R. Peltz
Signature
8/31/99
Renewal Date
10-26-98
Date
STATE OF CALIFORNIA

Plans Approval Date

BROWN AND CALDWELL
9040 FRIARS ROAD STE 220
SAN DIEGO, CA 92108-1601

PROJECT LANDSCAPE ARCHITECT	DESIGN OVERSIGHT APPROVAL	REGISTRATION NO.	DATE
MIKE PELTZ	PRINTED NAME / SIGNATURE CID TESORO		

Approval on to impact on State facilities and conformance with applicable standards and that technical oversight was performed as desired in the California Department of Transportation A & E Consultant Services Manual.

The Contractor shall possess the Class (or Classes) of license

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/L)	SOIL pH EPA TEST METHOD 9045
B1-1	Surface	333	26	---	---
B1-2	0.30	176	15	---	---
B2-1	Surface	314	40	---	---
B3-1	Surface	147	14	---	---
B4-1	Surface	505	86	0.54	7.5
B4-2	0.30	45	---	---	---
B5-1	Surface	54	---	---	---
B5-2	0.30	32	---	---	---
B5-3	0.60	18	---	---	---
B6-1	Surface	293	24	---	---
B6-2	0.30	126	10	---	---
B7-1	Surface	85	7.2	---	---

It is recommended that if the upper 0.6 meters of soil excavated is to be re-used on-site, it should be placed under pavement at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil is to be exported to another Caltrans right-of-way location, it should be re-used in the same manner as described above. Should the soil excavated to a depth of 0.6 meters at the site require disposal, it should be disposed as a hazardous waste with regard to lead concentrations.

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	T SH
11	SD	8, 15	R9.0/R12.7, 10.9/13.2	4	

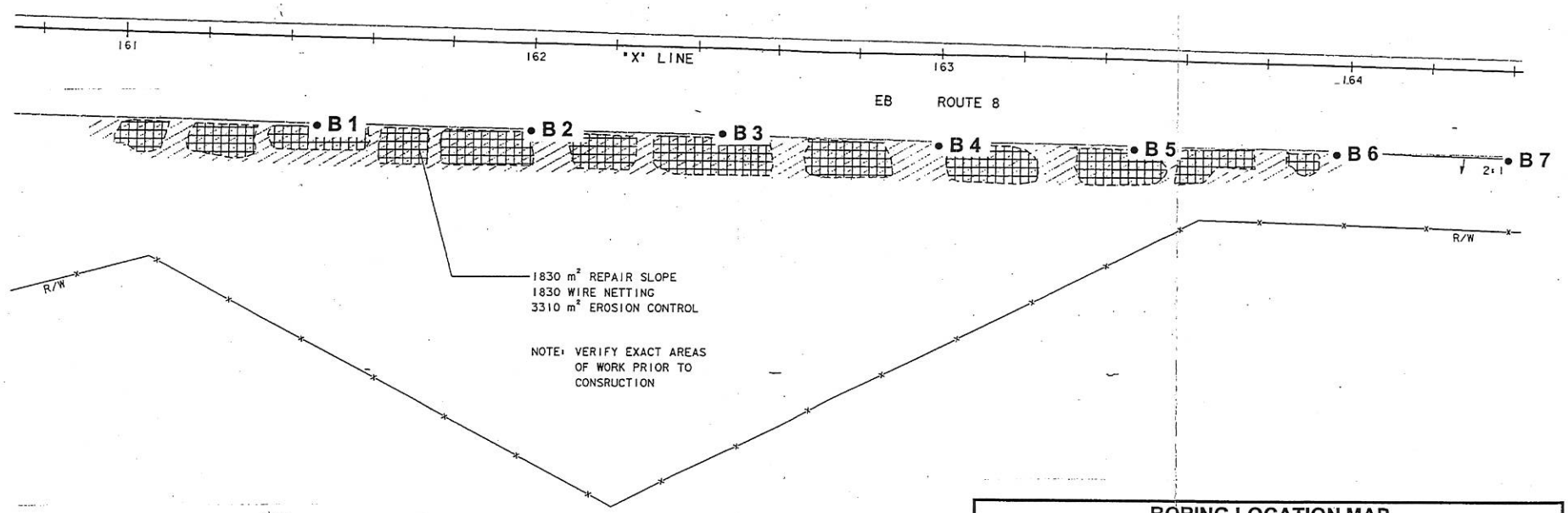
REGISTERED LANDSCAPE ARCHITECT — DATE 10-30-98

LICENSED LANDSCAPE ARCHITECT — Michael S. Paitz — Signature — 8/31/99 — Renewal Date — 10-30-98 — Date — STATE OF CALIFORNIA

PLANS APPROVAL DATE

KTU+A
6165 GREENWICH DR. SUITE 200
SAN DIEGO, CA 92122

The State of California or its officers or agents shall not be responsib for the accuracy or completeness of electronic copies of this plan.



CALCULATED DESIGNED B
CHECKED BY
DESIGN OVERSIGHT
CID TESORO
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

GEOCON
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 619 558-6100 - FAX 619 558-8437

PROJECT NO.
FIGURE
DATE

SCALE 1:500

NOTE: SEE SHEET C-1 FOR LEGEND AND CONSTRUCTION DETAILS
THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY
ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

BORING LOCATION MAP

ROUTE 8 FROM THE 8/15 SEPARATION TO 0.6 KILOMETERS WEST OF COLLEGE AVENUE OVERCROSSING

DATE 3-26-99	PROJECT NO. 08900-06-07	FIGURE 2

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/L)	SOIL pH EPA TEST METHOD 9045
B8-1	Surface	74	---	---	---
B9-1	Surface	31	---	---	---
B9-2	0.30	19	---	---	---
B10A-1	Surface	156	15	---	---
B10B-1	Surface	20	---	---	
B10B-2	0.30	72	---	---	---
B10B-3	0.60	29	---	---	6.3
B10C-1	Surface	35	---	---	
B11-1	Surface	124	7.7	---	7.0
B11-2	0.30	42	---	---	---
B12A-1	Surface	1010	135	0.95	---
B12A-2	0.30	102	12	---	---
B12B-1	Surface	77	3.7	---	---

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/L)	SOIL pH EPA TEST METHOD 9045
B12C-1	Surface	35	---	---	---
B13-1	Surface	456	42	0.49	---
B13-2	0.30	199	19	---	---
B14A-1	Surface	1310	102	0.94	---
B14A-2	0.30	111	14	---	---
B14B-1	Surface	220	16	---	---
B14C-1	Surface	185	9.0	---	---
B14D-1	Surface	31	---	---	---
B14E-1	Surface	ND	---	---	---
B15-1	Surface	361	29	---	---
B16-1	Surface	1060	99	1.1	---
B16-2	0.30	1160	128	0.38	7.4

Caltrans Metric

DIST	COUNTY	ROUTE	TOTAL PROJECT	NO.	SHEET
11	SD	8.15	R9.0/R12.7, 10.9/13.2	5	

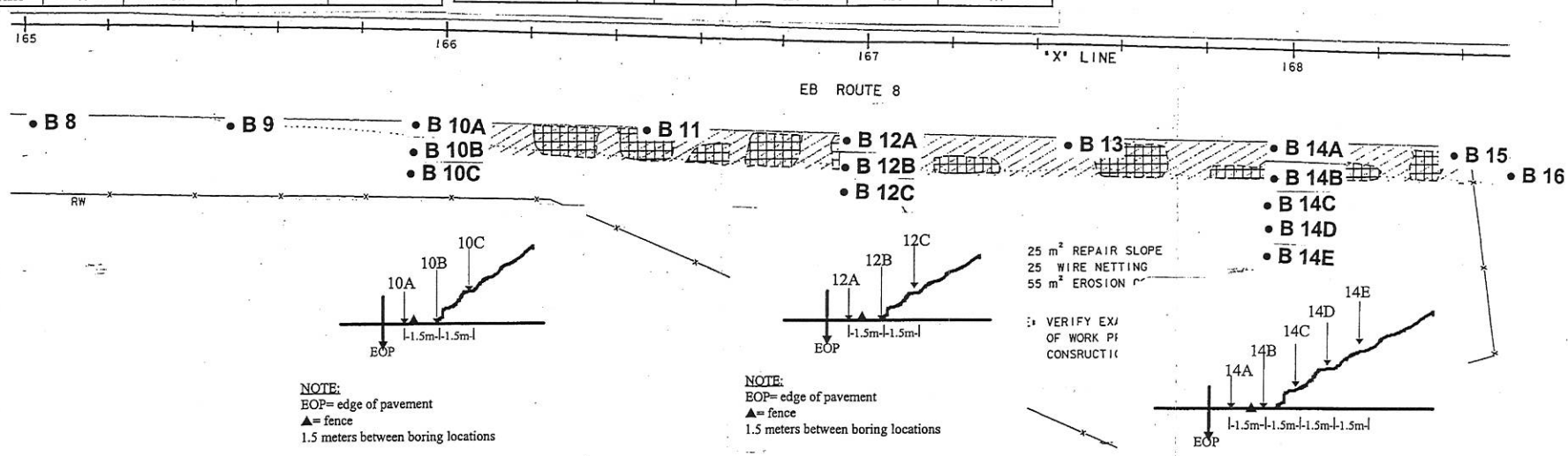
REGISTERED LANDSCAPE ARCHITECT — DATE 10-30-98

LICENSED LANDSCAPE ARCHITECT — Signature 8/31/99 — Reference Date 10-30-98 — Date — STATE OF CALIFORNIA

PLANS APPROVAL DATE

KTU+A
6165 GREENWICH DR. SUITE 200
SAN DIEGO, CA 92122

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan.



NOTE:
EOP= edge of pavement
▲= fence
1.5 meters between boring locations

NOTE:
EOP= edge of pavement
▲= fence
1.5 meters between boring locations

NOTE:
EOP= edge of pavement
▲= fence
1.5 meters between boring locations

SCALE 1:500

Soil excavated from the vicinity of step-out borings B14B and B14C to a depth of approximately 0.15 meters should be handled in the same manner as described for the borings advanced along the shoulder of the roadway. Soil excavated from the vicinity of borings B10B, B10C, B12B, B12C, B14D, and B14E may be re-used on-site, at another Caltrans location, or disposed of as non-hazardous with respect to lead impacts.

It is recommended that if the upper 0.6 meters of soil excavated is to be re-used on-site, it should be placed under pavement at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil is to be exported to another Caltrans right-of-way location, it should be re-used in the same manner as described above. Should the soil excavated to a depth of 0.6 meters at the site require disposal, it should be disposed as a hazardous waste with regard to lead concentrations.

GEOCON
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 619 558-6100 - FAX 619 558-8437

PROJECT NO.
FIGURE
DATE

BORING LOCATION MAP

ROUTE 8 FROM THE 8/15 SEPARATION TO 0.6 KILOMETERS WEST OF COLLEGE AVENUE OVERCROSSING

DATE 3-26-99	PROJECT NO. 08900-06-07	FIGURE 3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

DESIGN OVERSIGHT: CID TESORO

CALCULATED/DESIGNED BY: N — CHECKED BY: N

Rte 8 KP 7.9- 11.4
PM 4.9 - 7.1

Report

Aerial Lead Investigation

Median Barrier Replacement on I-8
San Diego County, California
Work Request No. 11-1998-06

Contract No. 43A0010

APEX Project No. 276DT

PREPARED FOR:

CALTRANS – District 11
Environmental Engineering
2829 Juan Street
San Diego, California 92110

PREPARED BY:

APEX Environmental Recovery
15661 Producer Lane, Suite N
Huntington Beach, California

February 22, 1999

APEX ENVIRONMENTAL RECOVERY
SMARTER SOLUTIONS FOR A CLEANER TOMORROW

Report

Aerial Lead Investigation

Median Barrier Replacement on I-8
San Diego County, California
Work Request No. 11-1998-06

Contract No. 43A0010

APEX Project No. 276DT

PREPARED FOR:

CALTRANS – District 11
Environmental Engineering
2829 Juan Street
San Diego, California 92110

PREPARED BY:

APEX Environmental Recovery
15661 Producer Lane, Suite N
Huntington Beach, California

Dan Louks,
Registered Geologist #4883

February 22, 1999

ENVIRONMENTAL RECOVERY
SMARTER SOLUTIONS FOR A CLEANER TOMORROW

TABLE 3
STATISTICAL SUMMARY FOR SOIL
Total Lead
I-8 and I-15 Interchange
W.O. #11-1998-06, Contract # 43A0010
APEX Project No. 276DT

Transect A	Mg/l
Mean for Total Pb	671.5
Mean for STLC Citric	133
Mean for STLC Di	11.2
Standard Deviation for Total Pb	647.8
Standard Deviation for STLC Citric	159
Standard Deviation for STLC Di	7.7
Upper Confidence Level 80% total Pb	542
Upper Confidence Level 95% Total Pb	648
Upper Confidence Level 95% STLC Citric	196
Upper Confidence Level 95% STCL Di	14.2

Transect B	Mg/l
Mean for Total Pb	520.5
Mean for STLC Citric	52.6
Mean for STLC Di	16
Standard Deviation for Total Pb	607.7
Standard Deviation for STLC Citric	77.8
Standard Deviation for STLC Di	10.7
Upper Confidence Level 8090 Total Pb	292
Upper Confidence Level 95% Total Pb	345
Upper Confidence Level 95% STLC Citric	76
Upper Confidence Level 95% STCL Di	19

CABLE LACING

THIS PAGE INTENTIONALLY LEFT BLANK

LACING CONDUCTORS

Conductors within equipment must be kept in place to present a neat appearance and aid in tracing the conductors when alterations or repairs are required. This is done by LACING the conductors into wire bundles called cables. An example of lacing is shown in figure 2-39. When conductors are properly laced, they support each other and form a neat, single cable.

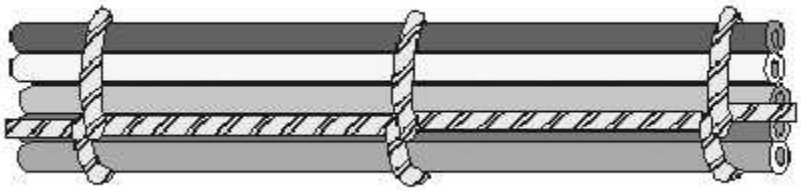


Figure 2-39.—Conductor lacing.

A narrow, flat tape should be used wherever possible for lacing and tying. This tape is not an adhesive type of tape. Round cord may also be used, but its use is not preferred because cord has a tendency to cut into wire insulation. Use cotton, linen, nylon, or glass fiber cord or tape, according to the temperature requirements. Cotton or linen cord or tape must be prewaxed to make it moisture and fungus resistant. Nylon cord or tape may be waxed or unwaxed; glass fiber cord or tape is usually not waxed.

The amount of flat tape or cord required to single lace a group of conductors is about two and one- half times the length of the longest conductor in the group. Twice this amount is required if the conductors are to be double laced.

Before lacing, lay the conductors out straight and parallel to each other. Do not twist them together because twisting makes conductor lacing and wire tracing difficult during troubleshooting.

A lacing shuttle on which the cord can be wound keeps the cord from fouling during the lacing operation. A shuttle similar to the one shown in figure 2-40 can easily be made from aluminum, brass, fiber, or plastic scrap. Rough edges of the material used for the shuttle should be filed smooth to prevent injury to the operator and damage to the cord. To fill the shuttle for a single lace, measure the cord, cut it, and wind it on the shuttle. For double lace, proceed as before, except double the length of the cord before you wind it on the shuttle. For double lace, start both ends of the cord or tape on the shuttle in order to leave a loop for starting the lace. This procedure is explained later in the chapter.

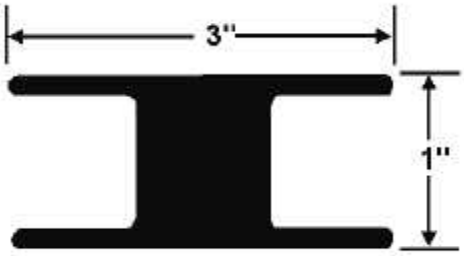


Figure 2-40.—Lacing shuttle.

Some equipment requires the use of twisted wires. One example is the use of "twisted pairs" for the ac filament leads of certain electron tube amplifiers to minimize radiation of their magnetic field. This prevents an annoying hum in the amplifier output. You should duplicate the original layout when relacing any wiring harness.

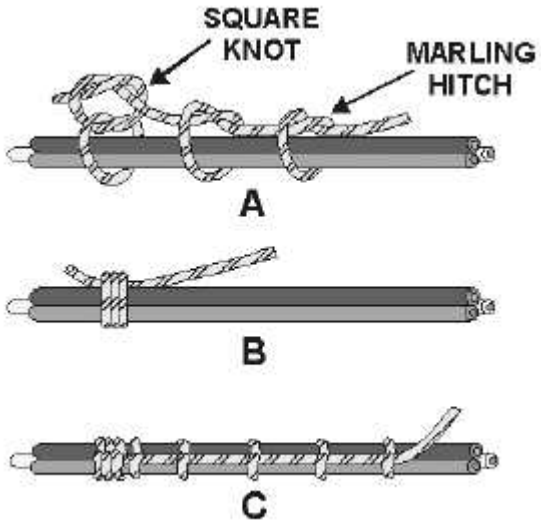
Lace or tie bundles tightly enough to prevent slipping, but not so tightly that the cord or tape cuts into or deforms the insulation. Be especially careful when lacing or tying coaxial cable. Coaxial cable is a conductor used primarily for radio-frequency transmission. It consists of a center conductor separated from an outer conductor (usually called a shield) by an insulating dielectric. The dielectric maintains a constant capacitance between the two conductors, which is very important in radio transmission. The dielectric is soft and deforms easily if tied too tightly or with the wrong type of tape.

CAUTION

Do not use round cord for lacing or tying coaxial cable or bundles that contain coaxial cable. Use only the approved military specification tape to lace or tie coaxial cables or bundles containing coaxial cables.

SINGLE LACE

Single lace can be started with a square knot and at least two marling hitches drawn tightly. Details of the square knot and marling hitch are shown in figure 2-41. Do not confuse the marling hitch with a half hitch. In the marling hitch, the end is passed over and under the strand, as shown in view A of the figure. After forming the marling hitches, draw them tightly against the square knot, as shown in view B. The lace consists of a series of marling hitches evenly spaced at 1/2-inch to 1-inch intervals along the length of the group of conductors, as shown in view C of the figure.



When dividing conductors to form two or more branches, follow the procedure illustrated in figure 2-42. Bind the conductors with at least six turns between two marling hitches, and continue the lacing along one of the branches, as shown in view A. Start a new lacing along the other branch. To keep the bends in place, form them in the conductors before lacing. Always add an extra marling hitch just prior to a breakout as shown in view B.

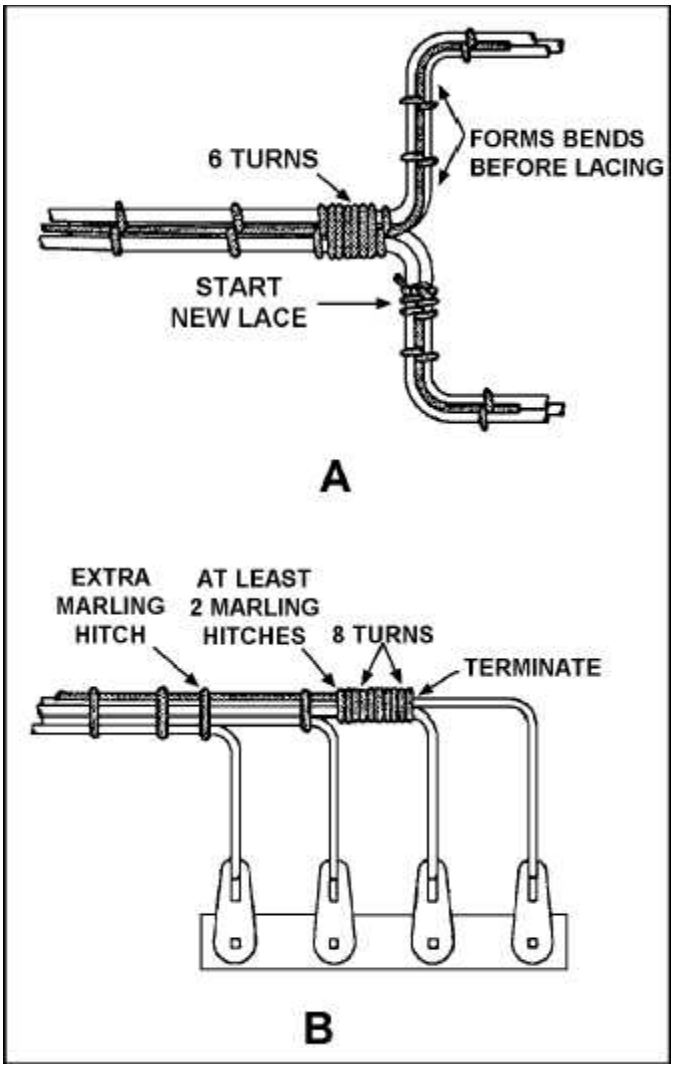


Figure 2-42.—Lacing branches and breakouts.

Double lace should be used on groups of conductors that are 1 inch or larger in total diameter. Either a single lace or a double lace may be used on groups of less than 1 inch.

DOUBLE LACE

Double lace is applied in a manner similar to single lace, except that it is started with a telephone hitch and is double throughout the length of the lacing (figure 2-43). Both double and single lace may be ended by forming a loop from a separate length of cord and using it to pull the end of the lacing back underneath a serving of approximately eight turns (figure 2-44). An alternate method of ending the lacing is illustrated in figure 2-45. This method can also be used for either single- or double-cord lacing. Another method is by using a marling hitch as a lock stitch (figure 2-46) to prevent slippage. This procedure will also prevent unraveling should a break occur to the lacing.

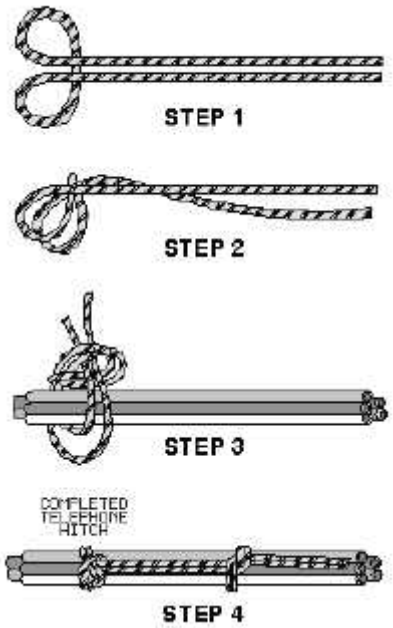


Figure 2-43.—Starting double lace.

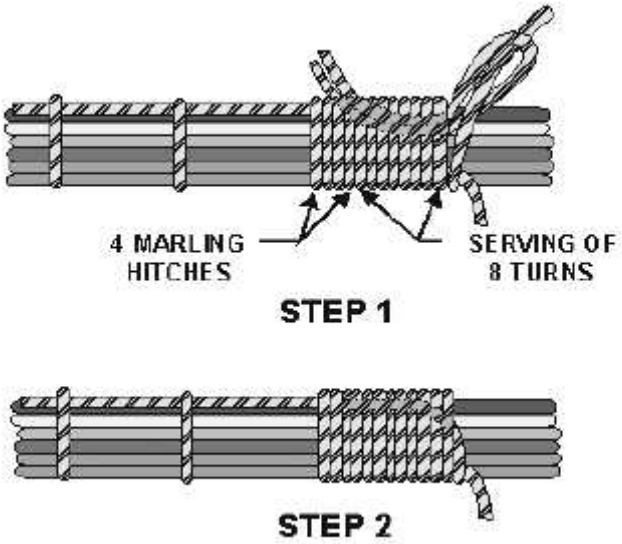


Figure 2-44.—Terminating double lace.

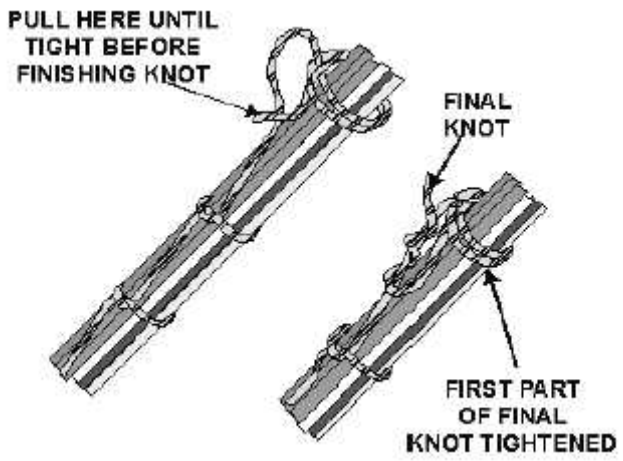


Figure 2-45.—Alternate method of terminating the lace.

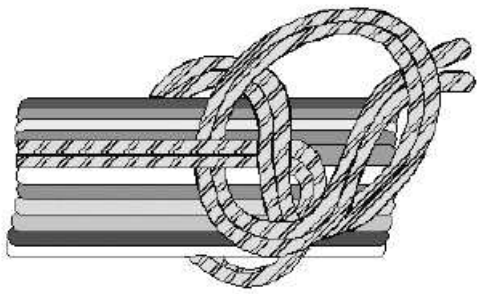


Figure 2-46.—Marling hitch as a lock stitch

The spare conductors of a multiconductor cable should be laced separately, and then tied to active conductors of the cable with a few telephone hitches. When two or more cables enter an enclosure, each cable group should be laced separately. When groups are parallel to each other, they should be bound together at intervals with telephone hitches (figure 2-47).

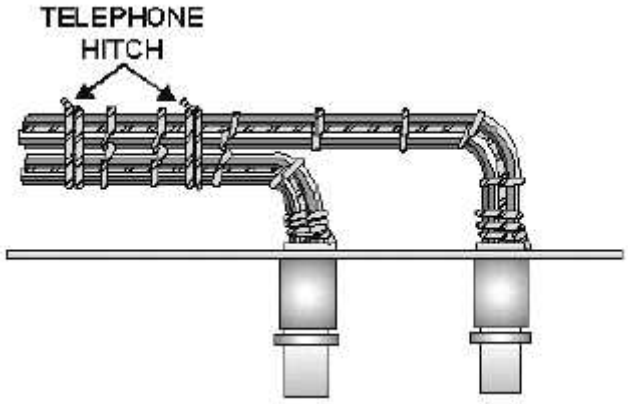


Figure 2-47.—Spot tying cable groups.

SPOT TYING

When cable supports are used in equipment as shown in figure 2-48, spot ties are used to secure the conductor groups if the supports are more than 12 inches apart. The spot ties are made by wrapping the cord around the group as shown in figure 2-49. To finish the tie, use a clove hitch followed by a square knot with an extra loop. The free ends of the cord are then trimmed to a minimum of 3/8 inch.

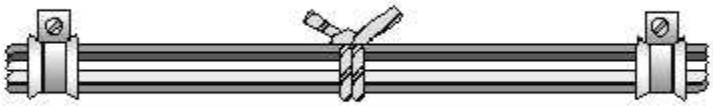


Figure 2-48.—Use of spot ties.

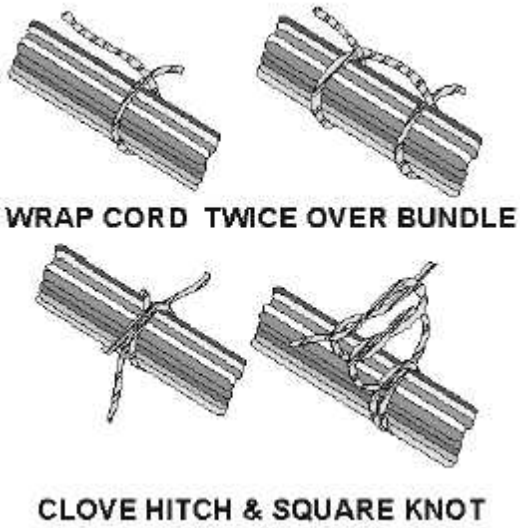


Figure 2-49.—Making spot ties.

SELF-CLINCHING CABLE STRAPS

Self-clinching cable straps are adjustable, lightweight, flat nylon straps. They have molded ribs or serrations on the inside surface to grip the wire. They may be used instead of individual cord ties for securing wire groups or bundles quickly. The straps are of two types: a plain cable strap and one that has a flat surface for identifying the cables.

CAUTION

Do not use nylon cable straps over wire bundles containing coaxial cable. Do not use straps in areas where failure of the strap would allow the strap to fall into movable parts.

Installing self-clinching cable straps is done with a Military Standard hand tool, as shown in figure 2- 50. An illustration of the working parts of the tool is shown in figure 2-51. To use the tool, follow the manufacturer's instructions.

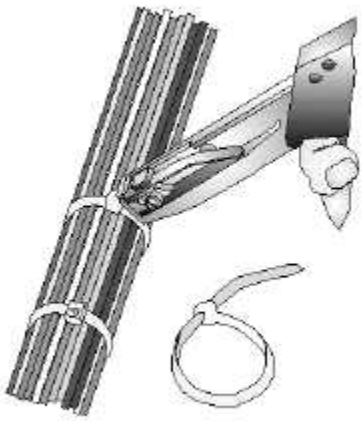


Figure 2-50.—Installing self-clinching cable straps.

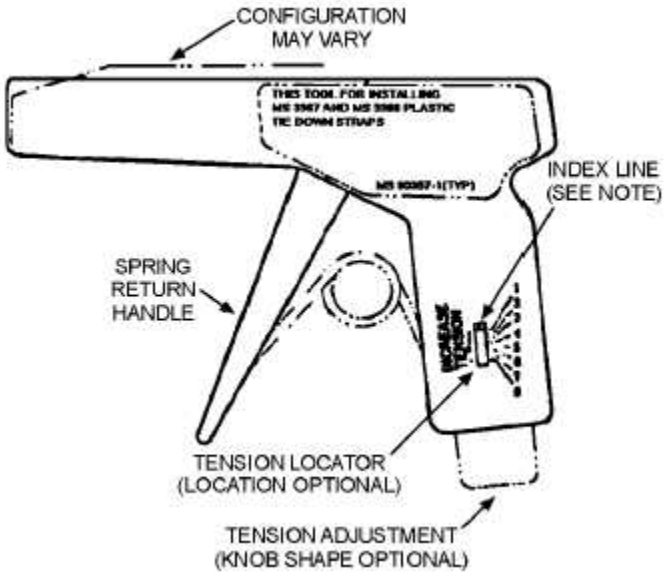


Figure 2-51.—Military Standard hand tool for self-clinching cable straps.

WARNING

Use proper tools and make sure the strap is cut flush with the eye of the strap. This prevents painful cuts and scratches caused by protruding strap ends. Do not use plastic cable straps in high-temperature areas (above 250º F).

HIGH-TEMPERATURE PRESSURE-SENSITIVE TAPE LACING

High-temperature, pressure-sensitive tape must be used to tie wire bundles in areas where the temperature may exceed 250º F. Install the tape as follows (figure 2-52):

1. Wrap the tape around the wire bundle three times, with a two-thirds overlap for each turn.

2. Heat-seal the loose tape end with the side of a soldering iron tip.

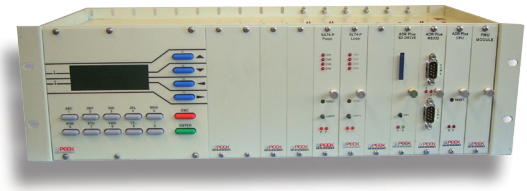
THIS PAGE INTENTIONALLY LEFT BLANK

AUTOMATIC TRAFFIC COUNTER AND PIEZOELECTRIC SENSOR CONNECTOR

THIS PAGE INTENTIONALLY LEFT BLANK

ADR 3000 Plus

Traffic Counter/Clasifier



The Peek ADR-3000 Plus is a high performance traffic counter and classifier designed for permanent installation. With the various options, the ADR-3000 Plus can count up to 64, or classify up to 32 lanes of traffic, including up to 24 WIM sensor inputs.

Several exclusive features have been incorporated into the ADR-3000 Plus. The CPU electronics are fitted with a replaceable socket mounted fuse. Front panel mounted LED's indicate a successful start up of the microprocessor. LEDs also warn of system fault conditions and indicate the communications port activity and status. Additionally, a reset switch mounted on the front panel of the ADR-3000 Plus providing an easy method of restarting a unit during diagnostics, similar to cycling power.

Each unit can perform up to eight studies, plus generate per-vehicle records, with up to 4096 bins of data. This could include, for example, classification by speed, by lane, and volume. The type, configuration, and format of data to be collected can be custom programmed or selected from menu-driven choices. Available data types include per-vehicle records, per-lane data, binned vehicle classification by axle, speed, length, gap, or headway, or almost any combination of these classifications. Vehicles can also be classified according to either a Scheme "F" or a user-defined classification scheme.

Quality Assurance Testing

Each unit is individually tested for correct operation during a computer controlled environmental chamber test cycle, based on the NEMA TS/2 standards. All input circuits have been designed and tested to the NEMA TS/2 standards for surge (lightning) protection.

Features

- Simple to set up and operate
- 2 MB onboard memory (1 MB accessible)
- Multilane operation
- SD memory option for additional storage
- Up to 64 inputs with a variety of sensor options
- Scheme "F" or user-defined classification scheme
- High-speed communications and telemetry
- U.S. standard or metric units
- Optional integrated control panel with LCD readout
- Solar power options
- Battery "sentinel"
- Auto daylight savings timer

Optional Features

The Peek ADR-3000 Plus is an instrument rack-based unit, expandable by function with individual plug-in modules. Available to fit standard EIA 19" or Type 170 enclosures, the Peek ADR-3000 Plus may also be shelf or panel mounted.Electrical connections (external) are via rear mounted terminal strips for sensor inputs. Communications are supported via an RS232-C connector. Plug-in modules can consist of power supply, central processing unit, communications, control panel, memory, loop sensors, piezo sensors, weigh-in-motion sensors, contact closure inputs, analog to digital inputs or a combination of these for a particular application. Individual plug-in modules are Eurocard in size with DIN standard connectors. Typical module width is 1 inch.

Power options include 115 VAC, 6 or 12 VDC, solar power and operational battery-backup as necessary. An internally supported hardware real time clock maintains time and date, regardless of unit power, for up to ten years.

Two Year Limited Warranty

Peek Traffic warrants this product against manufacturing defects in materials and workmanship for two years from date of shipment from Peek Traffic. Specific contracts and regional laws may vary or alter these terms.

Peek Traffic Corporation, a Signal Group Company
2906 Corporate Way Palmetto, FL
34221 (941) 845-1200 | (800) 245-7660 www.peektraffic.com

Specifications

Dimensions	5.25”H x (10” or 19”) W x 9.35”D (135mm x (255-480)mm x 240mm)
Weight	Less than 15 pounds (6.8 kg)
Temperature	-40°F to +165°F (-40°C to +74°C)
Display	20 digits x 4 line liquid crystal display
Inputs	24 sensor inputs of various types allowed, optionally up to 64
Counter rate	Handles 200 counts, per second, per input
Interval	1, 2, 5, 6, 10, 15, 30 and 60 minutes 2, 3, 6, 12 and 24 hours, real time events Four daily peak periods available
Microprocessor	Intel 80C186
Capacity	Approximately 3,280 days of volume data
Communications	Selectable RS-232 serial baud rates between 300 and 19,200 baud (115,200 baud-optional), via a UL and CSA approved female socket, with up to three ports available
Options	Up to 8 sensor input modules or 64 individual inputs, depending on actual configuration, that can be a combination of loop, piezo, WIM or contact closure inputs
	Front panel keypad and display
	SD memory card socket
	Solar power option
	Compatible with the AxleLight® laser sensor

Support Software

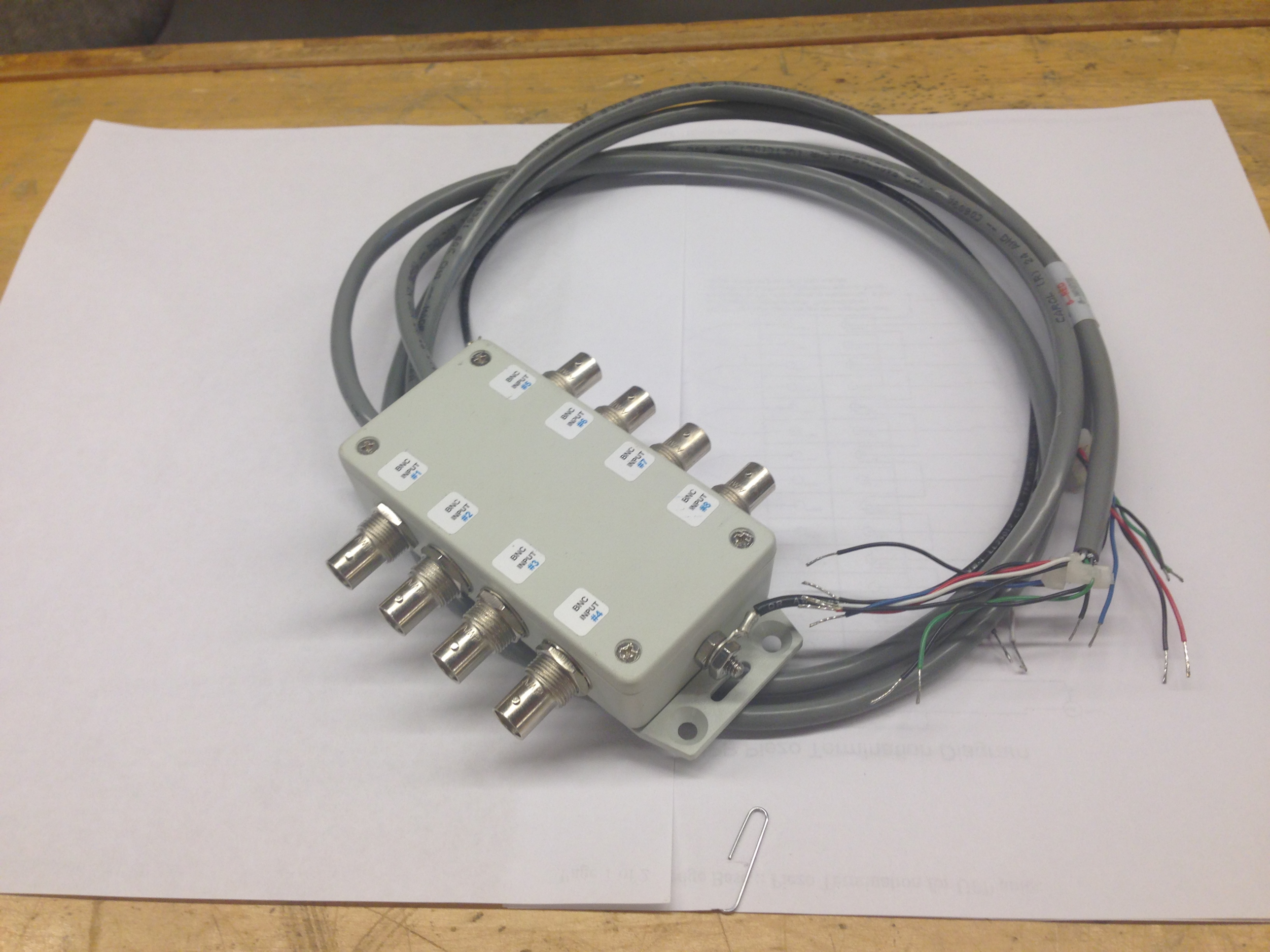
A user-friendly Windows™ software package is available to complement the Peek ADR-3000 Plus. This software is the Traffic Operations Processing Software (TOPS) program from Peek Traffic.

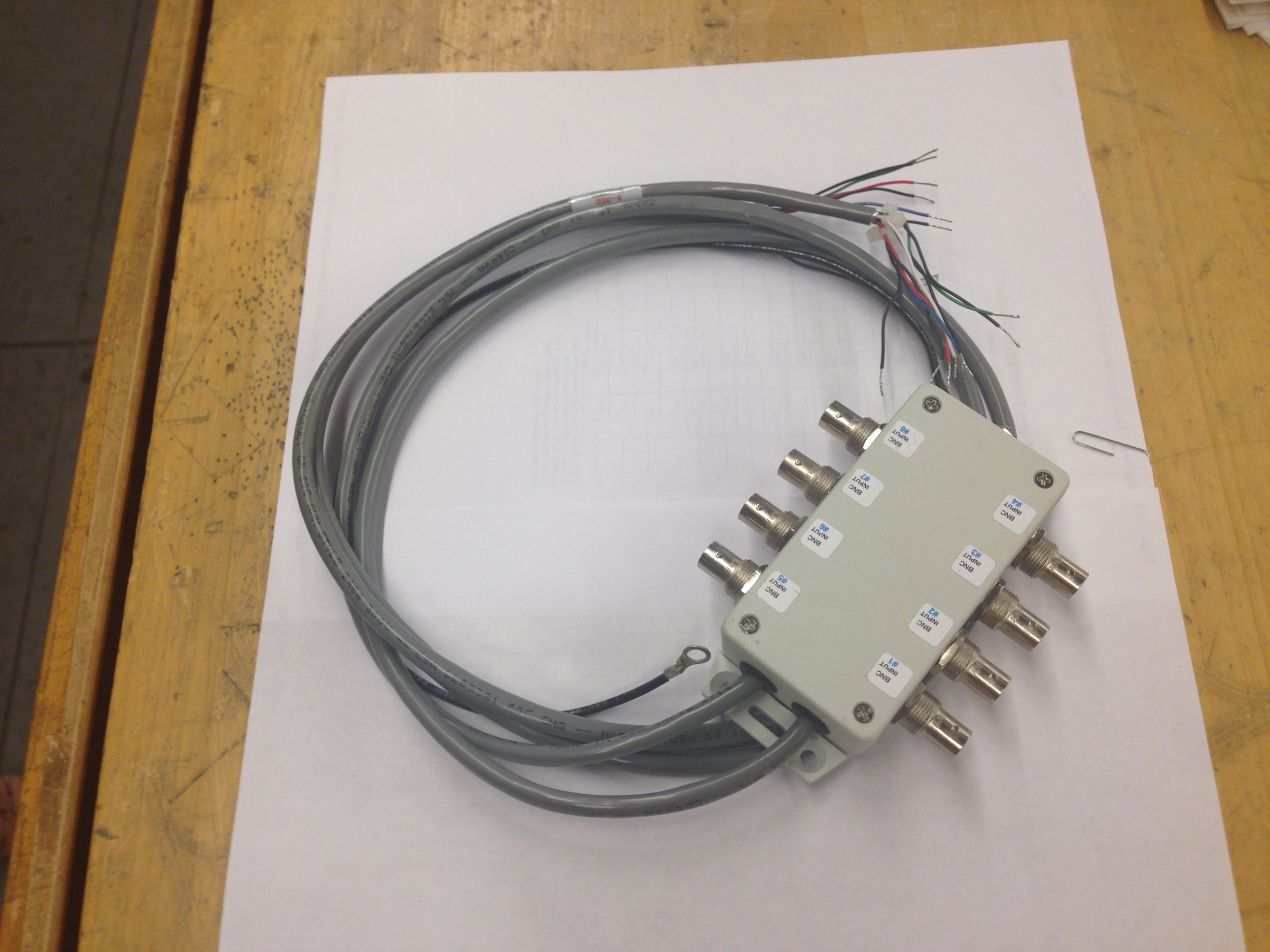
The TOPS program provides multi-file processing, stores data files into a single database for easy file sharing among TOPS users, allows for edit and preview of reports before printing, provides for ADR data processing protocols,enables remote or local setup of Peek ADR units and collection of data by direct manual connection or by the added functionality of automatic polling of field sites via modem connection (auto polling and weigh-inmotion support are add-in options). The TOPS program reads all files and generates a suite of daily, weekly and monthly reports. A user definable classification function, within the program, provides the ability to customize classification and to transfer the new scheme to the Peek ADR-3000 Plus. Processed data may be exported to various other software packages.

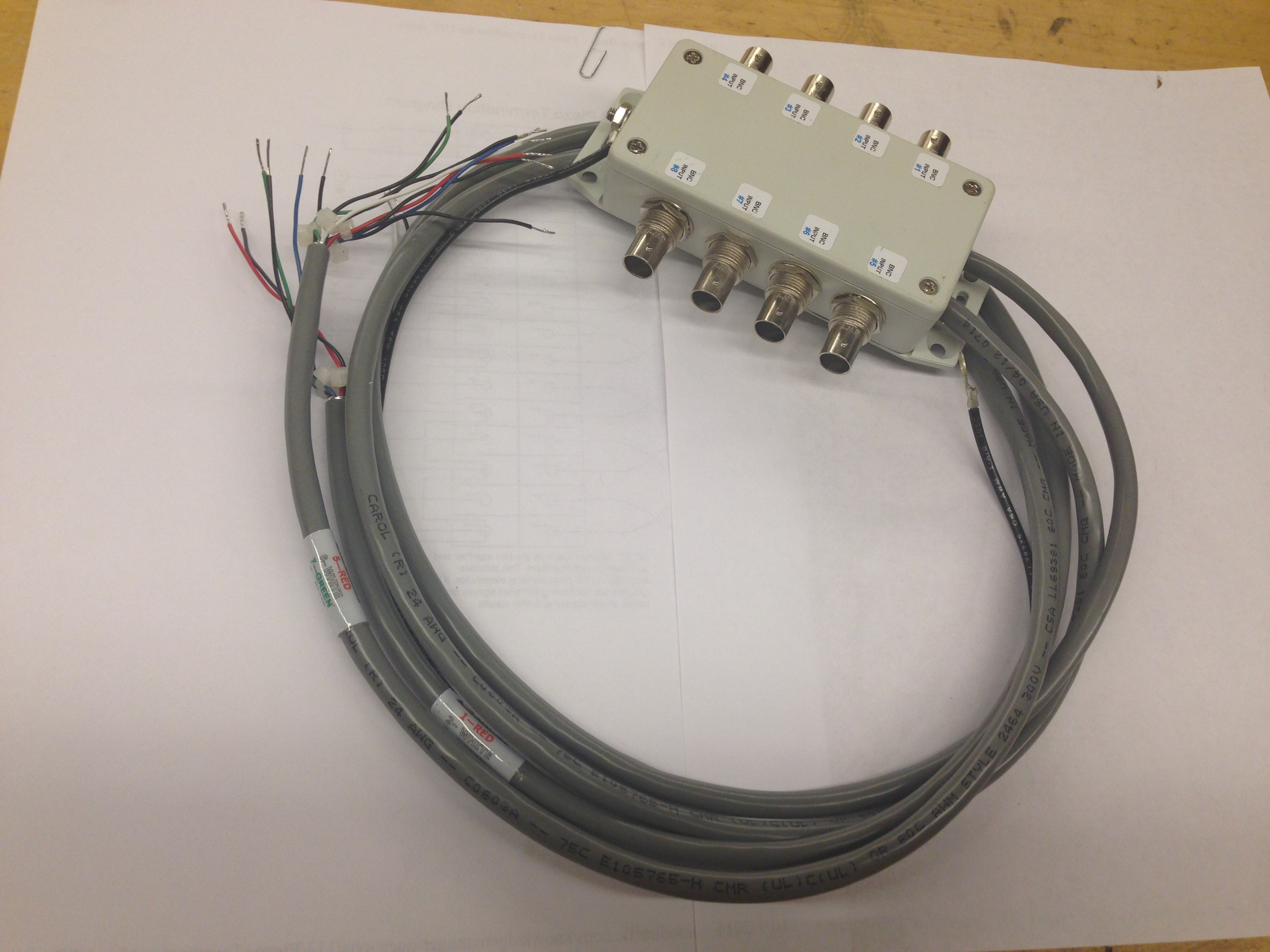
Peek Traffic Corporation
A Signal Group Company
2906 Corporate Way
Palmetto, FL 34221
(941) 845-1200 | (800) 245-7660
www.peektraffic.com

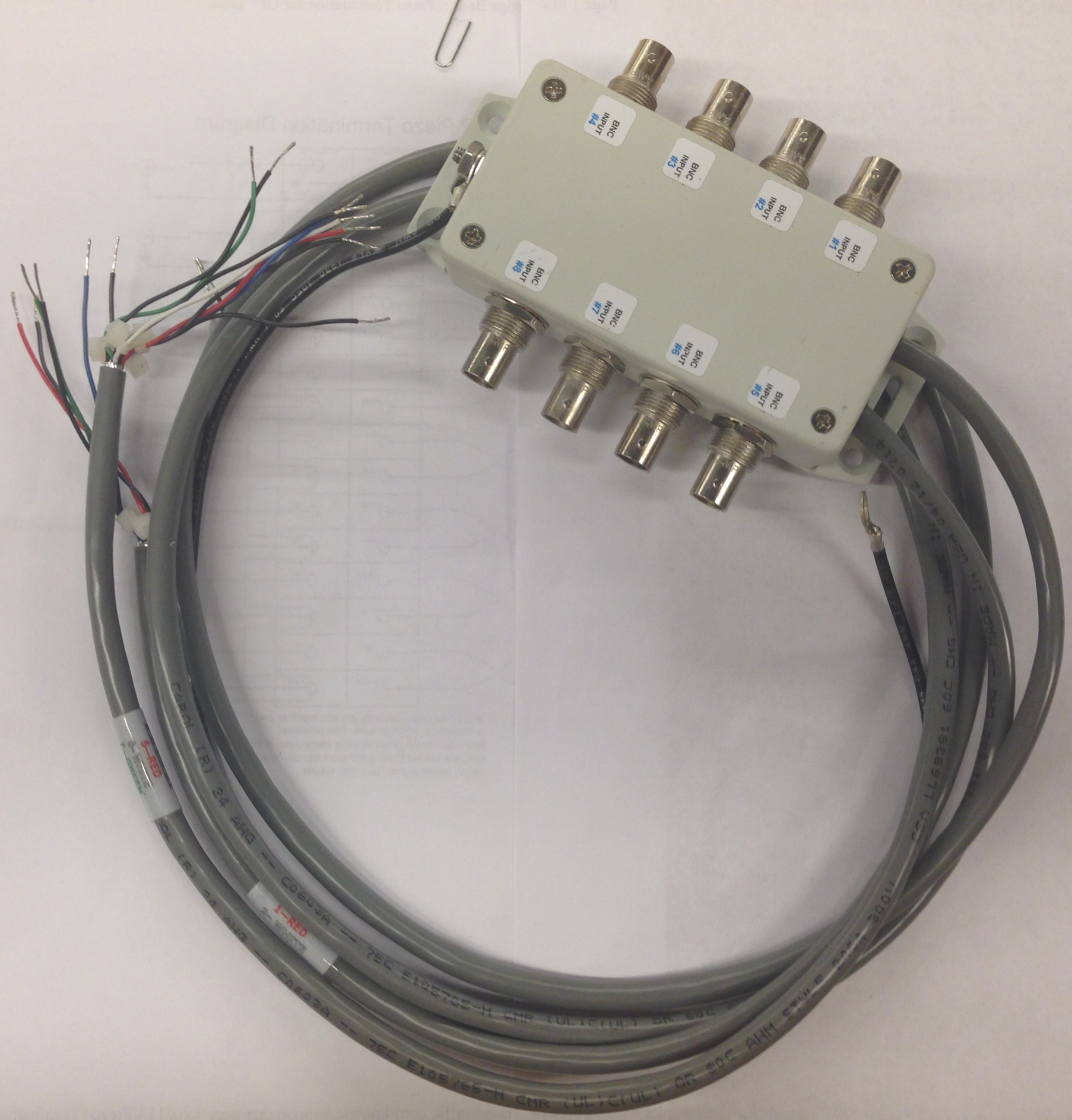
About Signal Group – covers a broad range of quality turnkey traffic control products and services. Signal Group products have helped to make motorists around the world safer and their travels more pleasant and efficient. This expertise, experience, and breadth of product lines has made Signal Group one of the most respected and recognized leaders in the traffic control marketplace

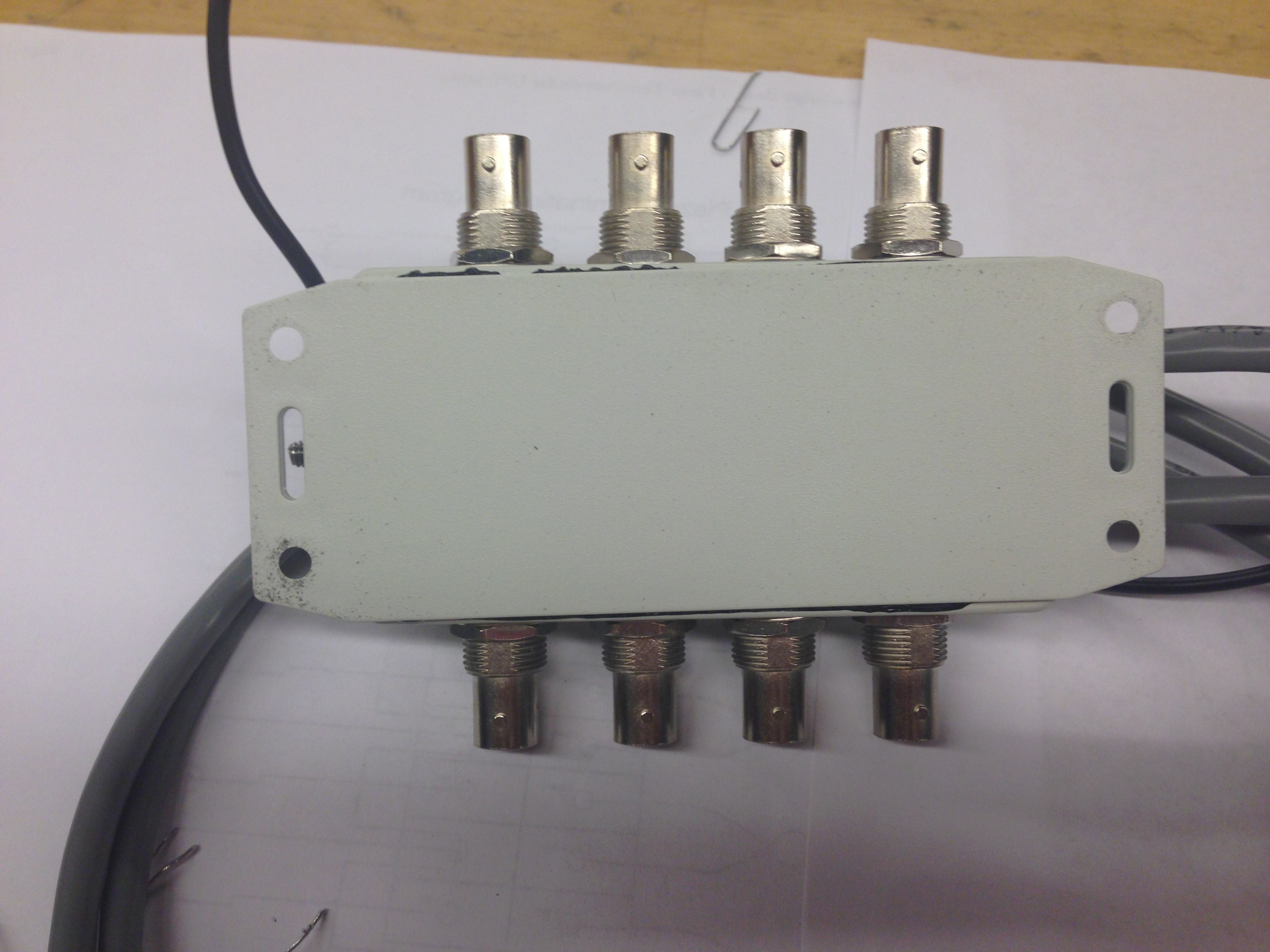
The information contained in this publication is presented for informational purposes only, and while every effort has been made toensure its accuracy, the information is not to be construed as warranty or guarantee, express or implied, regarding the products orservices described herein or their use or applicability. No license is granted by implication or otherwise to any of Signal Group’sintellectual property. Signal Group reserves the right to alter or revise any of its products or published technical data related thereof at any time without notice. ©2012 Signal Group.


BNC INPUT #1
BNC INPUT #2
BNC INPUT #3
BNC INPUT #4
BNC INPUT #5
BNC INPUT #6
BNC INPUT #7
BNC INPUT #8
CAT-5E

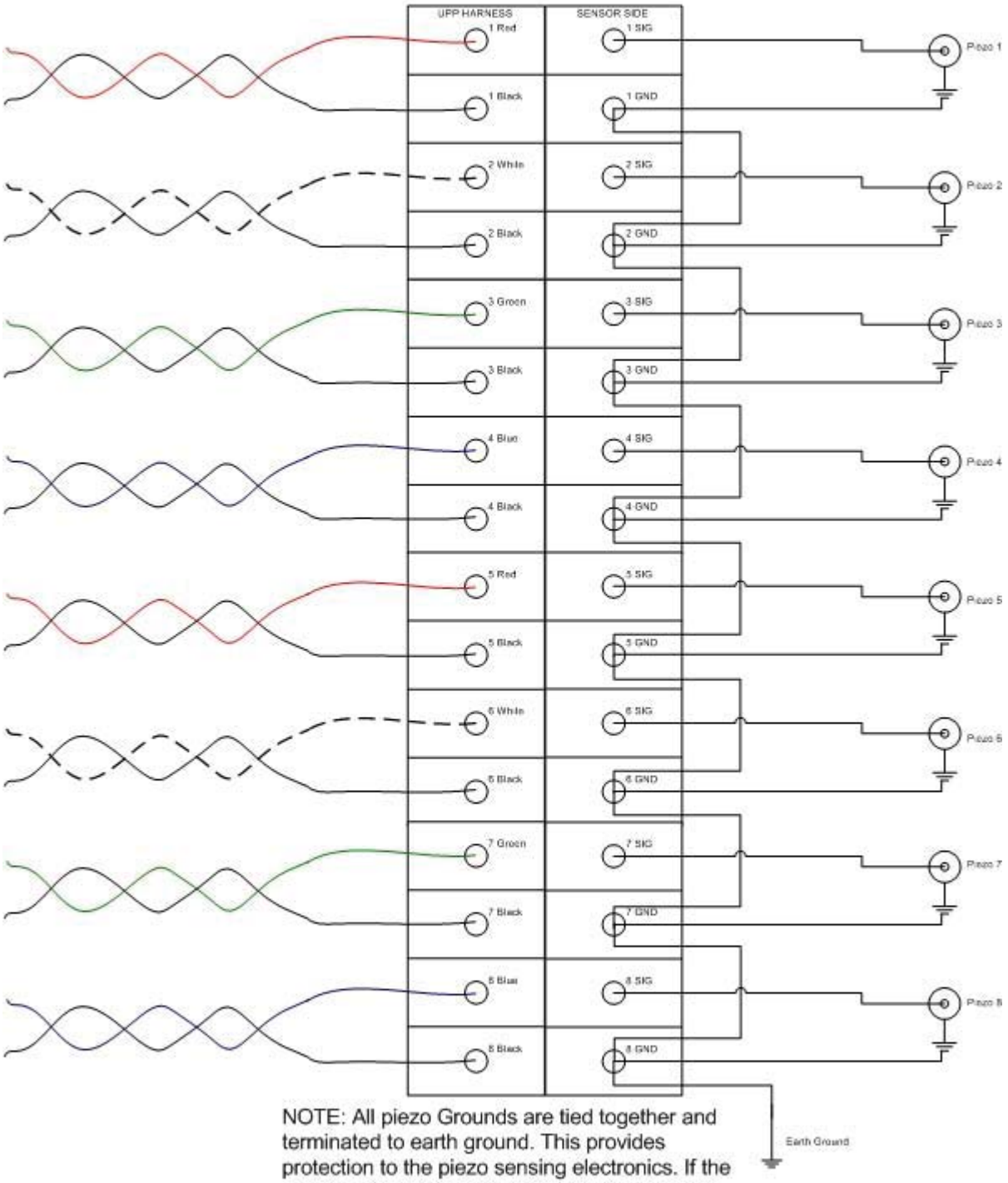

BNC INPUT #9
BNC INPUT #7
BNC INPUT #6
BNC INPUT #5
BNC INPUT #4
BNC INPUT #3
BNC INPUT #2
BNC INPUT #1


BNC INPUT #1
BNC INPUT #2
BNC INPUT #3
BNC INPUT #4
BNC INPUT #5
BNC INPUT #6
BNC INPUT #7
BNC INPUT #8
CAROL (R) 24 AWG -- C0603A -- 75C E105765-H CMR (UL)C(UL) OR 80C AWM STYLE 2464 300V -- CSA LL69381 60C CMG -- MADE IN USA 04/12 0714
5-RED
6-WHITE
7-GREEN
1-RED
2-WHITE


BNC INPUT #4
BNC INPUT #3
BNC INPUT #2
BNC INPUT #1
BNC INPUT #8
BNC INPUT #7
BNC INPUT #6
BNC INPUT #5
8-RED
1-RED


4

UPP Piezo Termination Diagram



NOTE: All piezo Grounds are tied together and terminated to earth ground. This provides protection to the piezo sensing electronics. If the grounds are left floating transient signals could cause erratic signals and data results.

CABLE VERIFICATION WORKSHEET

THIS PAGE INTENTIONALLY LEFT BLANK

Cable Verification Worksheet

Contract number: _____ Contractor: _____

Operator: _____ Date: _____

Link number: _____ Fiber number: _____

Expected location of fiber ends (Route / PM): End 1:____ / _____ End 2: ____ / _____

Attach the following photos with this form:

a. Reel (minimum of 6 different views include 1 from 20 feet away)
b. Cable (minimum of 10 different views)
   b.1 Wrapping and packaging
   b.2 Cable

Cable length in kilometers: _____

OTDR Test:

a. Continuity: _____ (pass or fail)

b. List any Anomaly: _____

_____

_____

_____

_____

To be completed by the Engineer:

Engineer signature: _____

Date cable accepted: _____

THIS PAGE INTENTIONALLY LEFT BLANK

LINK LOSS BUDGET WORKSHEET

THIS PAGE INTENTIONALLY LEFT BLANK

Link Loss Budget Worksheet

Contract No. _____ Contractor: _____

Approved by Caltrans: _____

Date: _____ Operator: _____

Link Number: _____ Fiber Color: _____

Buffer Color: _____ Cable No.: _____

Expected Location of fiber ends (Rte / PM): End 1: ___ / ____ End 2: ___ / ____

	1310 nm	1550 nm	
Measured OTDR Test Results:			
Forward Loss:	_____ dB	_____ dB	1A
Reverse Loss:	_____ dB	_____ dB	1B
Average Loss [(1A + 1B)/2]:	_____ dB	_____ dB	1C
Measured Power Meter and Light Source Test Results:			
Forward Loss:	_____ dB	_____ dB	2A
Reverse Loss:	_____ dB	_____ dB	2B
Average Loss [(2A + 2B)/2]:	_____ dB	_____ dB	2C

Calculated Fiber Loss:			
Length of the link (from OTDR):	_____ km	_____ km	3A
Allowed loss per km of fiber:	0.4 dB/km	0.3 dB/km	3B
Total Allowed Loss due to the fiber (3A X 3B):	_____ dB	_____ dB	3C
Calculated Splice Loss:			
Number of Splices in the Link:	_____	_____	4A
Allowed Link Loss per Splice:	0.3 dB	0.3 dB	4B
Total Allowed Loss due to Splices (4A X 4B):	_____ dB	_____ dB	4C
Calculated Connector Loss:			
Number of Connectors:	_____	_____	5A
Allowed Connector Loss per connector:	0.75 dB	0.75 dB	5B
Total Connector Loss (5A X 5B):	_____ dB	_____ dB	5C
Total Calculated Loss:			
(3C + 4C + 5C):	_____ dB	_____ dB	6A

Link Verification:			
Compare 1C and 2C, enter the larger value:	_____ dB	_____ dB	7A
Difference between Measured Loss to Calculated Loss (7A – 7B):	_____ dB	_____ dB	7B
If the value of 7B is greater than zero, the link failed the test.	_____	_____	**PASS** or **FAIL**

To be completed by the Engineer:

Engineer signature: _____

Date cable link accepted: _____

THIS PAGE INTENTIONALLY LEFT BLANK

FIBER OPTIC TRENCH LOCATION

THIS PAGE INTENTIONALLY LEFT BLANK

Fiber Optic Trench Location

No.	Fiber Optic Marker[a]	latitude[b]	longitude[b]
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			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

Note:

[a]Identify FO delineator either **Fiber Optic Disk Marker (DM)** or **Trench Delineator (TD)**

[b]Provide the GPS location of the fiber optic markers in decimal format. Provide the latitude and longitude up to 6 significant figures after the decimal point using the NAD84 datum

THIS PAGE INTENTIONALLY LEFT BLANK

Fiber Optic Trench Location

No.	Fiber Optic Marker[a]	latitude[b]	longitude[b]
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			

Note:

[a]Identify FO delineator either **Fiber Optic Disk Marker (DM)** or **Trench Delineator (TD)**

[b]Provide the GPS location of the fiber optic markers in decimal format. Provide the latitude and longitude up to 6 significant figures after the decimal point using the NAD84 datum

THIS PAGE INTENTIONALLY LEFT BLANK

Fiber Optic Trench Location

No.	Fiber Optic Marker[a]	latitude[b]	longitude[b]
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108			
109			
110			
111			
112			
113			
114			
115			
116			
117			
118			
119			
120			

Note:

[a]Identify FO delineator either **Fiber Optic Disk Marker (DM)** or **Trench Delineator (TD)**

[b]Provide the GPS location of the fiber optic markers in decimal format. Provide the latitude and longitude up to 6 significant figures after the decimal point using the NAD84 datum

EXISTING CABINETS

THIS PAGE INTENTIONALLY LEFT BLANK

THIS PAGE INTENTIONALLY LEFT BLANK

EXISTING CABINETS(1114000046)

1.	SIGNAL	P6.302
2.	RAMP METERING	Z6.320
3.	TRAFFIC MONITORING STATION	U6.670
4.	RAMP METERING	Z7.056
5.	CHANGEABLE MESSAGE SIGN	I7.151
6.	SIGNAL	P8.429
7.	SIGNAL	P8.278
8.	RAMP METERING	Z8.340
9.	RAMP METERING	Z9.583
10.	TRAFFIC MONITORING STATION	U10.129

THIS PAGE INTENTIONALLY LEFT BLANK