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DIVISION OF LOCAL ASSISTANCE
Office of Policy Development and Quality Assurance

PROCESS REVIEW #13-01

**Use of Proprietary Material/Products in
Construction Contracts**

FINAL REPORT

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2. Recommend Approval:	Original Signed By _____ RIHUI (RAY) ZHANG, Chief Office of Policy Development & Quality Assurance	<u>8/15/2013</u> Date
3. Approved:	Original Signed By _____ DENIX D. ANBIAH, Chief Division of Local Assistance	<u>8/15/2013</u> Date



I. Executive Summary

This process review was initiated after Caltrans Division of Local Assistance (DLA) received complaints that some local agencies may have improperly used brand name and proprietary products in their federal-aid highway construction projects. Through the review of selected project contract documents, the goal of this review is to verify that local agency construction contract documents comply with Federal regulations when patented or proprietary material and products, or when product names or brands are used in the Federal-aid construction contract documents.

Federal regulation (23 CFR 635.411) prohibits the expenditure of federal funds on a Federal-aid highway project “for any premium or royalty on any patented or propriety materials, specifications, or process”, unless specific conditions are met. This requirement is defined in the Local Assistance Procedures Manual (LAPM), in Chapter 12 - Section 12.12.

A summary of the findings, observations, recommendations is as follows:

Findings:

- Although there are available guidance from FHWA and in LAPM, there is general lack of knowledge or awareness (at both local agencies and their consultant support) about Federal regulation governing the use of Proprietary or Patented products or equipment, and lack of awareness about guidance provided in the LAPM.
- DLAE oversight of local agency contract documents were performed satisfactorily.
- DLAEs are tasked to review annually one contract for each local agency. However, the DLAEs, who are civil engineers, are ill suited for this review when it comes to non-roadway items.

Observations:

- Local agency personnel or engineers do not perform necessary review of project and contract documents prepared by their consultant; therefore, they are unaware of any potential deficiencies, even if they are knowledgeable of the requirements.

Recommendations:

- DLAEs to follow up with local agencies on the reviewed projects to determine if federal funds participated in the payment of premium on the brand name products and take appropriate corrective actions.
- Inform local agencies, through the use of DLA website bulletins, notices, etc. of the required Federal provisions in the construction contract documents.
- Highlight the requirement during the Federal Aid Series classes and through focused webinars, and provide additional guidance on the use of generic specification and providing a minimum of three equal products in the specifications when brand names are used.
- DLA to update LAPM Chapter 12.12 to include the requirement of “at least three” named products in the specification when brand names are used.
- DLAE should take appropriate time to review the projects’ PS&E Checklists for completeness.
- When reviewing local agency contracts, DLAEs should seek assistance from appropriate subject matter experts, such as traffic design and operation engineers.



II. PROCESS REVIEW

A. Background

In March 2013, Cal Signal Corp (CSC) presented to Caltrans' Division of Local Assistance (DLA) documents related to some local agency construction contract advertising and bid documents, and alleged that some of the material and/or products specifications are using sole-sourced or Brand names in violation of Federal contracting rules.

CSC submitted electronic files related to seven local agency contracts sponsored by City of Pleasant Hill, Sacramento Regional Transit District, City of Palo Alto, City of Madera, City of San Carlos, East Bay Regional Park District and City of Berkeley.

Federal regulation (23 CFR 635.411) prohibits the expenditure of federal funds on a Federal-aid highway project "for any premium or royalty on any patented or propriety materials, specifications, or process", unless specific conditions are met. Materials and products that are judged equal may be bid under generic specifications. If only patented or proprietary products are acceptable, they shall be bid as alternatives with all, or at least a reasonable number (at least three) of acceptable materials or products listed. The local agency may approve a single source if it can be found that its utilization is in the public interest. The approved PIF shall be fully documented and retained in the project files."

Local Assistance Procedures Manual (LAPM), in Chapter12 - Section 12.12, defines these requirements

B. Process Review Goals and Methodology:

The goal of this review is to verify if the sample contracts identified by the CSC allegation (projects with FAHP funding) complied with Federal regulations (23 CFR 635.411) and guidance in LAPM, Chapter12 - Section 12.12, when using proprietary material and products, or when products name or brand are used in their construction contract documents. The review also looked at whether or not District Local Assistance Engineer (DLAEs) was satisfactorily monitoring local agency implementation of the said regulation.

The process review was conducted by Mohammad Maljai and Moe Shakernia, and followed the methodology below. It included desk reviews to ascertain Federal funding and if so, to further analyze contracts information, interview sponsoring local agencies, regulators and other subject matter experts.

1. Identify project description, characteristics and verify federal funding
2. Obtain and review the actual project contract documents and bid packages
3. Obtain and review the PS&E checklists for project
4. Interview local agency representative
5. Consult Caltrans contacts in Traffic Operations for benchmarking product plans & specifications
6. Consult FHWA contacts

C. Process Review Analysis:

Two of the seven projects (the Buskirk Avenue Widening Phase II Project sponsored by City of Pleasant Hill, Safe Route to School Project sponsored by City of Berkeley) are funded entirely by local fund and do not have any federal funds. Therefore, the project is not subject to FHWA regulations and prohibition and is beyond the jurisdiction of this review. No further review was performed.

The South Sacramento Corridor Phase 2 Project sponsored by the Sacramento Regional Transit District is funded by Federal Transit Administration. Therefore, the project is not subject to FHWA regulations and prohibition and is beyond the jurisdiction of this review. No further review was performed.

The State Route 99/ Fourth Street Interchange Project sponsored by City of Madera is on the State Route system. Therefore, the project is outside the jurisdiction of Division of Local Assistance. However, the Caltrans project manager for the project (in District 6) was alerted of the issue.

The remaining three contracts were reviewed in detail as described below.

➤ **Alma Street HSIP Project, FPN HSIPL-5100(014) sponsored by City of Palo Alto:**

The PS&E checklist for the project indicates that proprietary items are not used and as a result a PIF was not filed. However, the project's special provisions included the following brand name traffic signal equipment/products:

- Manhattan 2 type conductor, or approved equal
- Reed & Graham "Over-Kote" epoxy, or approved equal
- Iteris VDS, or approved equal
- Contract traffic signal equipment/product Quantity List includes Branded names such as Iteris, Isotec and Pelco.

In the project's specifications, brand names with an "or equal" were used; however, at least three equal products were not specified and propriety items bid alternative were not provided for the contractor to bid on.

The city official was interviewed about the contract and the findings. The city official indicated lack of knowledge about the requirement and the discrepancy in the particular project contract documents. No major or significant compatibility with existing equipment was identified by the city official. Therefore, there was no justification for using brand name products. There was evidence that the City had performed an analysis/testing of three Video Detection System (VDS), perhaps to address a possible bid protest. However, it is not clear what the City did with the result, or if the testing resulted in selection of alternative products.

➤ **East Side Connect Project, FPN CML-5267(015), sponsored by City of San Carlos:**

The PS&E checklist for the project **does not** indicate if proprietary items are or are not used. This deficiency was not identified by the checklist reviewer. However, review of the project

special provision shows that use of branded or named products comply with federal regulation, except in one instance.

The project special provision for electrical identification includes three brands for conduits, or approved equal. For controller units, the specials also refers to **Caltrans TEES and Qualified Product List**. The system wiring specials names three brands for conductors, or approved equal; and five brand names for wiring connectors & termini, or approved equal. The street lighting specification names three brands for lamps, or approved equal; and five brands for wiring connectors & termini, or approved equal. The contract's traffic signal special provision names **Trombone style for steel posts and Tesco for service cabinet**; however, no approved equal were mentioned in the specifications.

The city official was interviewed regarding the contract. The official was aware of the restriction on the use branded name products, however, did not know that a deficiency existed in this particular contracts, i.e. not aware that steel post called for a single branded name.

➤ **Iron Horse Regional Trail Project FPN TGR2DGL 6075(018), sponsored by East Bay Regional Park District:**

The PS&E checklist for the project indicates proprietary items are not used and as a result a PIF was not filed. However, the project specification (or special provisions) included the following traffic signal equipment/product Brands:

- Section 10-2.14 Traffic Signal Controller spec states “controller shall be **Naztec Type 980** Ethernet with latest version of Apogee NTCIP based Naztec Intersection control software....”
- Section 10-2.15 Controller Cabinet spec states “ cabinet shall be ‘plug and play’ ready with a Naztec Type 980 Ethernet Controller...” and “48 channels of loop detection will be landed along with the Auto Scope Solo Communication Interface Panel for four –camera configuration.”
- Section 10-2.16 Ethernet Switch spec states “Ethernet switch shall be **Actelis model ML688** or approved equal”
- Section 10-2.18 Vehicle Signal Faces and Signal Heads spec states “All vehicle signals shall be **Dialight** ITE Compliant ‘X’ and ‘XL’ 12-inch LED indications or approved equal”
- Section 10-2.19.1 Pedestrian Signal spec states “Pedestrian LED shall be 16” X 18” **Full Hand/Fullman.**”
- Section 10-2.19.2 Pedestrian Pushbuttons spec states “Pedestrian push buttons shall be the **Polara Bulldog III Model RBDL3-B** or approved equal.”
- Section 10-2.20.1 Loop Detection System spec states “Sensor units shall be **Detector Systems Digital Loop Model 910**, or equal.”
- Section 10-2.20.2 Video Detection System spec states “Shall be the **AutoScope Solo Terra** Detection System.”

In the project's specifications, brand names with an “or equal” were used; however, at least three equal products were not specified and propriety items bid alternative were not provided for the contractor to bid on.

City official was informed of the discrepancy in this particular contract document, in regards to the use of brand names products. The City, FHWA and Caltrans are working together to resolve the proprietary item issues on the project.

D. Process Review Findings:

- Although there are available guidance from FHWA and in LAPM, there is general lack of knowledge or awareness about Federal regulation governing the use of Proprietary or Patented products or equipment, and lack of awareness about guidance provided in the LAPM. The lack of knowledge maybe at both local agencies and their consultant support.
- DLAE oversight of local agency contract documents were performed satisfactorily. However, more thorough review of the PS&E Checklists maybe warranted.
- DLAEs lack the necessary expertise when reviewing construction contracts for non-Civil items, such as electrical system and products specification for traffic control systems.

E. Process Review Observations:

- Local agency personnel or engineers do not perform necessary review of project and contract documents prepared by their consultant; therefore, they are unaware of any potential deficiencies, even if they are knowledgeable of the requirements.

F. Process Review Recommendations:

- DLAEs to follow up with local agencies on the reviewed projects to determine if federal funds participated in the payment of premium on the brand name products and take appropriate corrective actions.
- Inform local agencies, through the use of DLA website bulletins, notices, etc. of the required Federal provisions in the construction contract documents.
- Highlight the requirement during the Federal Aid Series classes and through focused webinars, and provide additional guidance on the use of generic specification and providing a minimum of three equal products in the specifications when brand names are used.
- DLA to update LAPM Chapter 12.12 to include the requirement of “at least three” named products in the specification when brand names are used.
- DLAE should take appropriate time to review the projects’ PS&E Checklists for completeness.
- When reviewing local agency contracts, DLAEs should seek assistance from appropriate subject matter experts, such as traffic design and operation engineers.