

ConstructConnect CRM Integration XML Format Version 1.3 Administrator's Reference



Copyright notice and statement

© ConstructConnect. All rights reserved.

All rights reserved. No part of this document may be copied, photocopied, reproduced, or distributed in any form or by any means without permission in writing from ConstructConnect. Notice of liability Information in this document is subject to change without notice. Any software described in this document is furnished under a license agreement and may be used or copied only in accordance with the terms of the agreement.

ConstructConnect 30 Technology Parkway South Suite 100 Norcross, GA 30092

Publication information

Use the following information when referencing this document:

Document name:	ConstructConnect CRM Integration XML Format Version 1.3 Administrator's Reference
Publication Date:	September 2022
Revision:	1.3 September



Table of Contents

Introduction	6
About this document	6
Who should use this document	6
Accessing the file	6
Understanding the export file	8
NASD values	8
Understanding URL components	8
CRM version 1.3 export schema	9
Example files	9
Using search filters	9
When files are exported	9
Renamed data values	10
Common terms used in this document	10
Xpath and nesting-level notation definitions	10
CRM integration XML format version 1.3 field descriptions	12
Projects	12
/Projects/Project	12
/Valuation	13
/Parameter	14
/DocumentAvailability	16



/ParentCategories/ParentCategory/SubCategories/	17
Category parent/child values	17
/StageComments	19
Stage parent/child values	19
/Address	21
/Contracts/Contract	22
Companies/Company	24
Classification parent/child values	25
/Companies/Company/Contacts/Contact	30
/Companies/Company/Addresses/Address	30
/Companies/Company/Phones/Phone	31
/Companies/Company/Email	31
/Companies/Company/Website	32
/Companies/Company/ParticipantRoles/ParticipantRole	32
/Companies/Company/PlanHolders/PlanHolder	32
/Companies/Company/BidderRoles/BidderRole	32
/Companies/Company/ClassificationTypes/ClassificationType	33
/Companies/CompanySummarizations/CompanySummary	33
/Companies/Company/ParentCompany	34
/Companies/Company/ParentCompany/Phones/Phone	34
/Companies/Company/ParentCompany/ParentCompanyAddress	34
/Users/User/Queries/Query	35



	/Users/User/User	35
	/UpdateSummarizations/UpdateSummary	35
	/PlanSpec/PlanRoom	36
	/PlanSpec/DocCenterUrl	36
	/Details/Detail	37
	/Materials/Material	37
	/RSMeansMaterialDivisions/Division/Materials/Material	37
	/RSMeansMaterialDivisions/Division/Materials/	37
	/Notes/Note	38
	/List Date	38
	/ProjectID	38
	/Title	39
	/Stage	39
	/URL	39
	/UpdateDate	40
	/ProjectParentID	40
	/IsProspective	40
	/UpdateText	41
Bu	yer Activity Report	42
	BarData	42
	/User	42
	/Trade	42



/BuyerContact	43
Appendix A – Material Demand CSI codes	45
Appendix B –CRM Integration XML format version 1.3 example files	51
Appendix C – CRM Integration XML format version 1.3 export schema	58



Overview

Introduction

The **Insight** CRM integration feature provides you with customized project lead data that you can import into your third-party CRM system.

Once you set up your customized **Insight** search, the results are exported in Extensible Markup Language (XML) format to download each day from the secure ConstructConnect - hosted site, accessible using File Transfer Format (FTP). Your search results are updated daily with new projects and continuous updates to projects you are tracking for development.

About this document

This document contains a description of the CRM export XML format file, including the data structure, field descriptions and values, and database sizing recommendations.

Who should use this document

This document is intended for system administrators and other technical personnel for use as a reference for customizing the CRM Integration XML file. Contact ConstructConnect if you have any questions about the content or use of this document.

Accessing the file

Your customized CRM Integration XML data export file is available for download using FTP each day by 8:00AM Eastern Standard Time. The file is compressed into a .zip format and uses the following naming convention:

DL_<companyname>_XML_YYYYMMDD

Example: The file for April 5, 2022 is named **DL_BestCompany_20220405**

The file is available on the secure ConstructConnect -hosted FTP location at ftp.cmdintegration.com. To access the file for download, you must have the following information.

- your user name, password and file name
- · a connection to the Internet
- · FTP software on your computer

Your FTP site logon name, password, and file name are all supplied by your ConstructConnect Account Manager. You can access your file for two weeks after the posting date on the secure ConstructConnect -hosted FTP location, after which time the file is no longer accessible.



Understanding the Export File

Introduction

The CRM export file contains all of the information for each project and company included in your export. This section provides information about the contents of the file, URL structure, links to the schema and schema examples, and a brief description of setting up a search for CRM export.

NASD values

ConstructConnect is now mapping both U.S. and Canadian construction data to a single common standard, the North American Standard Data (NASD) format. To see a side-by-side comparison of how the data types are now mapped using NASD, <u>click to download the NASD data matrix in Excel format</u>.

Understanding URL components

This section contains a description of how URLs are formatted for the CRM export, depending on the data represented.

Company and Project details

The following two URL represent company and project details, respectively:

- http://insight.cmdgroup.com/.../CompanyDetails/399270/2
- http://insight.cmdgroup.com/.../ProjectDetails/9209403/2

In the above examples,

- The numbers in **red** represent the Insight ID for the project or company.
- The numbers in green represent country, 1 for U.S. and 2 for Canada.

Project documents

The following is a matching document URL where the number at the end of the line is the query ID value, shown in magenta:

http://insight.cmdgroup.com /.../DocumentCenter/9179685/2/61179

- This URL returns any matching documents for your keyword searches.
- This feature is only available in the CRM Integration 1.3 schema.



CRM version 1.3 export schema

You can view the CRM 1.3 export schema in the following location:

Appendix C – CRM Integration XML format version 1.3 export schema

Example files

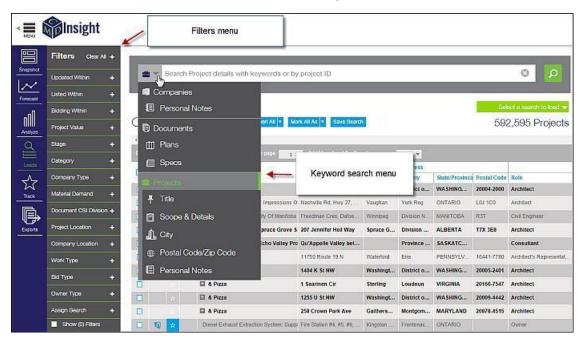
You can view examples of the export file in the following location:

Appendix B –CRM Integration XML format version 1.3 example files

Using search filters

You can use any of the filters located along the left side of the **Leads** window to set up the criteria for your CRM Integration searches. Additionally, keywords entered in the search bar tile along the top of the window are also valid for CRM Integration searches.

Search filters and options are found in the following locations:



When files are exported

Initially, projects selected for CRM export are included in the next scheduled feed, typically overnight from the day the project is selected. Beyond this initial export, projects are only included in your export when there is a significant update to the project. For information on the frequency of CRM exports, contact your system administrator.



Renamed data values

When mapping your data, you should be aware that some of the data fields for the 1.3 release have been renamed from earlier versions, as shown in the following table.

Former name	New name	
Project/Parameters/Parameter/RecordDate	Project/ListDate	
Project/Parameters/Parameter/BidDate	/Projects/Project/Contracts/Contract/BidDate	
Project/Parameters/Parameter/BidTime	Projects/Project/Contracts/Contract/BidTime	
Project/IsUnverified	Project/IsProspective	

Common terms used in this document

The following table contains common terms and definitions used in this document.

Term	Definition
Extensible Markup Language (XML)	XML is a data format for structured document interchange on the Web, allowing users to design a markup language which defines how to describe information in a certain class of documents. XML authors can define customized markup language for several classes of documents and share information between applications. The XML tagging structure allows for simplified manipulation of delivered data and allows the data structure to change without significantly impacting the target application.
File Transfer Protocol (FTP)	File Transfer Protocol (FTP) is a service that supports file transfer between local and remote computers, including the Internet. FTP supports several commands that allow bidirectional transfer of binary and ASCII files between computers. The FTP client is installed with the TCP/IP connectivity utilities.



Xpath and nesting-level notation definitions

The following table contains a description and definition of the X-path and nesting-level notation used in the file.

Xpath and nesting-level notation			
Description	Definition		
Attribute	The attribute name. Attributes are used to provide additional information for a XML element.		
Type (size)	The data type defines the data type of the field. The length of the field is defined by the data type. Example data types defined in the schema and sample data file include:		
	• xs:long		
	 xs:string DB - Defines the length of the xs:string. This may be used for sizing a DB for XML files. 		
	• xs:date		
	xs:boolean		
	These data types are defined under the following URL: http://schemas.microsoft.com/BizTalk/2003.		
	Other data types include:		
	• dls.Role		
	dls.SubCategory		
	dls.Summarydls.AddressType		
	dls.PhoneType		
	These data types are defined in the export schema. See Appendix A for more information.		
Description	The description of the attribute.		
Valid Example/Values	The valid example contains the values for the attribute. Specific values are also included.		
Child element	Cross-reference to the child element.		



CRM Integration XML Format Version 1.3 Field Descriptions

Introduction

This section contains a description of the fields used in the ConstructConnect CRM Integration XML Format version 1.3 export file.

Projects

/Projects/ Definition: Defines the export information.				
Attribute	Data Type	Description	Valid Examples/Values	
Version	xs:decimal	Version number of the export file.	Version 1.2.1	
Copyright	xs:string	Copyright		
ExportDate	xs:date	CRM export date and time	XML format = YYYY-MM-DD XML example = 2014-09-16	
Child Elements	Data Type	Description	Valid Examples/Values	
			·	

/Projects/Project

/Projects/Project Definition: Defines the project information.				
Attribute		Data Type	Description	Valid Examples/Values
Child Elements		Description		
Valuation		See /Valuation	for more information.	
Parameters		See /Paramete	er for more information.	
DocumentAvailability		See /Documer	ntAvailability for more inform	ation.
ParentCategories		See /ParentCategories/ParentCategory/SubCategories for more information.		
StageComments		See		
		/StageComments for more information.		
Addresses		See /Address for more information.		
Contracts		See /Contracts/Contract for more information.		
Companies		See Companies/Company for more information.		
Queries		See /Users/User/Queries/Query for more information.		
Users		See /Users/User for more information.		
UpdateSummary		See /UpdateSummarizations/UpdateSummary for more information.		
PlanRoom		See /PlanSpec/PlanRoom for more information.		



Attribute	Data Type	Description	Valid Examples/Values	
DocCenterUrl	See /PlanSpe	c/DocCenterUrl for more information.		
Detail	See /Details/[Detail for more information.		
Materials	See /Materials	s/Material for more information.		
Material	See /RSMear	nsMaterialDivisions/Division/Materials/	Material for more information.	
Materials	See /RSMear	nsMaterialDivisions/Division/Materials	/ for more information.	
Notes	See /Notes/N	See /Notes/Note for more information.		
ListDate	See /List Date	See /List Date for more information.		
ProjectID	See /ProjectII	See /ProjectID for more information.		
Title	See /Title for	See /Title for more information.		
Stage	See /Stage fo	See /Stage for more information.		
URL	See /URL for	See /URL for more information.		
UpdateDate	See /UpdateE	See /UpdateDate for more information.		
ProjectParentID	See /ProjectP	See /ProjectParentID for more information.		
IsProspective	See /IsProspe	ective for more information.		
UPdateText	See /UpdateT	ext for more information.		

/Valuation

/Projects/Project/Valuation Definition: Defines the valuation for the project.					
Attribute Data Type Descripti		Data Type Description			
ValueType	dls.ValueType	The value of the project.	Value	Definition	
			Confirmed	The project value is confirmed with a source by the RCD Research Team.	
			Estimate	The project value is estimated by the RCD Research Team.	
			Unconfirmed	The project value is a best guess by the RCD Research Team.	



/Projects/Project/Valuation Definition: Defines the valuation for the project.			
Attribute	Data Type	Description	Valid Examples/Values
Currency	XML = dls.Currency DB = VARCHAR(15)	Currency type	Values: U.S = US Canada = CAD
ValueType	xs:string dls.ValueType	Value of the project	8800000
Child Elements	Data Type	Description	Valid Examples/Values

/Parameter

Attribute	Data Type	Description	Valid Examples/Values
Ownership	XML = dls.Ownership DB = VARCHAR(180)	Funding type/ownership of the project	Private Provincial Federal Defense
WorkType	XML = dls.WorkType DB = VARCHAR(180)	Development type of the project	New Addition Alterations Engineering
CommenceDate	xs:date	Confirmed or estimated construction start date for the project	XML format = YYYY-MM- DD XML example = 2007-09-16
CompletionDate	xs:date	Estimated end date for the project	XML format = YYYY-MM- DD XML example = 2007-09-16
FloorsAboveGround	xs:integer	Number of floors above ground	Rule: Represents number of floors above ground that may be new or alterations. If an alteration, only the numbers of floors affected by the alteration are listed. For multiple buildings, the tallest structure's numbers of floors are represented. When a project has a development/worktype of addition/alterations, only the addition floors are shown.



			Any alteration floors, if known, are listed in the project text.
FloorsBelowGround	xs:integer	Number of floors below ground	Rule: Represents number of floors below ground that may be new or alterations. If alterations, only the number of floors affected by the alteration are listed, not the total number of floors below ground. If project has a development/worktype of addition/alterations, only the addition floors below ground are listed. The alteration floors below ground, if known, are listed in the project text.
FloorArea	xs:unsignedLong		
SiteArea	xs:unsignedLong	Site area (in acres) involved in the project	Captured in whole numbers only.
ParkingSpaces	xs:long	Number of parking places involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition parking spaces are listed. The alteration parking spaces, if known, are listed in the project text.
Structures	xs:long	Number of structures involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition structures are listed. The alteration structures, if known, are listed in the project text.



Units	xs:long	Number of units involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition units are listed. The alteration units, if known, are listed in the project text. Note: Projects that have units are prisons, hospitals, and condominiums.
FloorsBelowGround	xs:integer	Number of floors below ground	Rule: Represents number of floors below ground that may be new or alterations. If alterations, only the number of floors affected by the alteration are listed, not the total number of floors below ground. If project has a development/worktype of addition/alterations, only the addition floors below ground are listed. The alteration floors below ground, if known, are listed in the project text.
FloorArea	xs:unsignedLong		
SiteArea	xs:unsignedLong	Site area (in acres) involved in the project	Captured in whole numbers only.
ParkingSpaces	xs:long	Number of parking places involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition parking spaces are listed. The alteration parking spaces, if known, are listed in the project text.
Structures	xs:long	Number of structures involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition structures are listed. The alteration structures, if known, are listed in the project text.
Units	xs:long	Number of units involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition units are listed. The alteration units, if known, are listed in the project text. Note: Projects that have units are prisons, hospitals, and condominiums.



FloorsBelowGround	xs:integer	Number of floors below ground	Rule: Represents number of floors below ground that may be new or alterations. If alterations, only the number of floors affected by the alteration are listed, not the total number of floors below ground. If project has a development/worktype of addition/alterations, only the addition floors below ground are listed. The alteration floors below ground, if known, are listed in the project text.
FloorArea	xs:unsignedLong		
SiteArea	xs:unsignedLong	Site area (in acres) involved in the project	Captured in whole numbers only.
ParkingSpaces	xs:long	Number of parking places involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition parking spaces are listed. The alteration parking spaces, if known, are listed in the project text.
Structures	xs:long	Number of structures involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition structures are listed. The alteration structures, if known, are listed in the project text.
Units	xs:long	Number of units involved in the project	Rule: If project has a development/worktype of addition/alterations, only the addition units are listed. The alteration units, if known, are listed in the project text. Note: Projects that have units are prisons, hospitals, and condominiums.
MandatoryPreBidConferenceDate	xs:date	The date of the mandatory prebid conference.	



ContractType	XML- dls.ContractType DB = VARCHAR(180)	Contract type of the project	One of the following: General contractor Construction management Project management Design / Build Trade contract
FloorAreaUnitofMeasure	xs:long MaxLengthValue=255	Denotes square feet as the unit of measurement for the project floor area.	Square Feet
SiteAreaUnitofMeasure	xs:long	Denotes acres as the unit of measurement for project site area.	
GreenBuildingCertification	xs:long	Denotes the Green Building Certification status of the project.	Values:
LEEDCertificationIntent	xs:long	Denotes the LEED certification status of the project.	Values:
IsSingleTrade	xs:boolean	Indicates if a single trade project. The values are free form text.	Values: TRUE= is single trade FALSE= not single trade
SingleTradeClassification	xs:string	Indicates the type of single trade project.	



/DocumentAvailability

/Projects/Project/DocumentAvailability Definition: Defines the availability of documents.			
Attribute	Data Type	Description	Valid Examples/Values
Plans	XML=xs.boolean	Indicates the availability of	Addenda="true"
Specs		project documents:	Specs="false"
Addenda		available = true not available = false	
Child Elements	Data Type	Description	Valid Examples/Values

/ParentCategories/ParentCategory/SubCategories/

/Projects/Project/SubCategories/SubCategory Definition: Defines the parent and child categories of the project. Note: See the section for NASD values for information about category / subcategory mapping.					
Attribute	Data Type	Data Type Description Valid Examples/Values			
ParentCategory	Xs:string	Parent category for the project.	See the Category parent/child values in the following section for a full list of category values		
Child Elements	Data Type	Description	Valid Examples/Values		
SubCategory	XML = dls.SubCategory DB = VARCHAR(180)	Subcategory for the project. Limits: U.S. – 3 Canada – unlimited	See the Category parent/child values in the following section for a full list of category values		



Category parent/child values

The following table contains the Category parent and child values.

Parent	Child
COMMERCIAL	Broadcast Studios
	Laboratories
	Offices
	Parking Garages
	Rental Warehouses
	Transportation Terminals
COMMUNITY	Auditoriums
	Clubs, Community Centers
	Golf Course / Country Clubs
	Libraries
	Museums
	Religious Auditoriums
	Sports Arenas / Convention Centers
EDUCATIONAL	Athletic Bldgs
	Cafeterias
	Dormitories
	Elementary, Pre School
	Special, Vocational Schools
	College, University
	High Schools
GOVERNMENT	Courthouses
	Fire and Police Stations
	Government – Misc. Buildings
	Governmental Offices
	Park Facilities
	Post Offices
	Prisons
INDUSTRIAL	Manufacturing
	Miscellaneous Industrial
	Processing Plants
	Warehouses
MEDICAL	Hospitals, Clinics
	Medical Offices
	Nursing Homes



MILITARY	Military – Misc.
	Military Housing
	Military Offices
RESIDENTIAL	Apartments
	Condominiums
	Single Family
	Townhomes
RETAIL	Automotive
	Bank
	Entertainment
	Food Stores
	Hotels
	Restaurants
	Retail Stores
	Shopping Centers
CIVIL	Airport
	Athletic Fields and Courts
	Bridges and Culverts
	Dams and Canals
	Demolition
	Electrical Work
	Flood Control
	Marine Work
	Miscellaneous
	Parks and Landscaping
	Power Plants and Lines
	Railroad and Subway
	Roads
	Sewers and Water Mains
	Swimming Pools
	Tanks
	Tunnels
	Water and Sewage Treatment Plants



/StageComments

/Projects/Project/StageComments Definition: Defines the stage comment for the project.			
Attribute	Data Type	Description	Valid Examples/Values
Child Elements	Data Type	Description	Valid Examples/Values
StageComment	XML = dls.StageComment DB = VARCHAR(255)	Stage Comment: Activities of the bid stage projects.	Example for Stage Comment: Add bidders Closing date extended from 2014-09-16

Stage parent/child values

The following table contains a list and description of the Stage parent/child values.

Project/Projects/Stage	
Parent	Stage Child
PLANNING	Pre-design
	Schematic Design
	Design Development
	Construction Documents
BIDDING	SUBBIDS ASAP
	Biddate Set
POST BID	Bids Closed
	Construction Underway
	General Contractor Award
	Low Bids Announced
	Post Bid
	Subcontractor Awards
	Unit Prices Announced
MISCELLANEOUS	Disqualified Lead
	Cancelled
	Disqualified Project
	Duplicate Project



/Address

/Projects/Project/Addresses/Address Definition: Defines the address for the project.			
Attribute	Data Type	Description	Valid Examples/Values
ProjectAddressType	XML=dls. AddressType DB = VARCHAR(180)	Address type for the project. There is only one possible value for this type.	Project
Child Elements	Data Type	Description	Valid Examples/Values
AddressLine1	XML = dls.AddressLine DB = VARCHAR(128)	Project address	2468 Montview Drive
AddressLine2	XML = dls.AddressLine DB = VARCHAR(128)	Second line for the address	Not applicable
City	XML = dls.City DB = VARCHAR(50)	City or municipal where the project is located	Talmadge
StateProvince	XML = dls.State DB = VARCHAR(50)	Abbreviation representing the state or province of the project	GA
ZipPostalCode	XML = dls.Zip DB = VARCHAR(20)	Postal or zip code for project	30033
County	XML = dls.County DB = VARCHAR(60)	Name representing the county for the project	Fulton
CountryRegion	XML = dls.Country DB = VARCHAR(120)	Name representing the country or region for the project	United States Canada
Latitude	xs:decimal	The location of the project measured in degrees from the	37.548705
Longitude	xs:decimal	equator (latitude) and from the prime meridian (longitude).	77.458037



/Contracts/Contract

/Projects/Project/Contracts/Contract

Definition: Defines the bid contract conditions for a project. For a given project, it is possible to have multiple bid contract conditions. For U.S data, the general contractor bid date is used as the project's main bid date.

Attribute	Data Type	Description	Valid Examples/Values	
BidDate xs:date Bid date for a contract				
		Note: This value is formerly Project/Parameters/Parameter/BidDate		
			XML format = YYYY-MM-DD	
			XML example = 2007-09-16	
Conditions	XML = dls.Conditions (text)	This is the foremost contract condition that must be met by bidders so that they may bid on a project.	Not applicable	
Bonding	XML = dls.Bonding DB = VARCHAR(180)	Bonded and insured for the project. It is the general contractor insurance certificate. Bonding covers coverage for financial risk or loss on a project. Bonding refers to a type of surety guarantee that a specific project will be financially covered if performance is not complete or satisfactory.	Not applicable	
PlansFrom	XML = dls.Role DB = VARCHAR(180)	The source of project documents.		
BidTo	XML = dls.Role DB = VARCHAR(180)	Project role that is accepting bids on the project contract	Owner See dls:Role line in the export schema for a complete list of the stage examples.	
BidTime	XML = dls.BidTime	The time that bids are due for a proje	ect contract	
	DB = VARCHAR(120)	Note: This is formerly Project/Param	eters/Parameter/ BidTime	
			XML example = 12:00	
BidDateAsap	xs:boolean	Not applicable	Not applicable	
BidDateHold	xs:boolean	When the flag is set, the project has been placed on an indefinite hold.	If the flag is: TRUE = BidDateHold is set. FALSE = BidDateHold is not set.	
Classification	XML = dls.Role DB = VARCHAR(180)	How the company is classified.	Architect See dls:Role line in the export schema for a complete list of the role examples.	
Invitation	XML = dls.InvitationNumber DB = VARCHAR(50)	Unique invitation number assigned to the project for bidding purposes.	W912HY-04-B-0026 3819	



/Projects/Project/Contracts/Contract Definition: Defines the bid contract conditions for a project. For a given project, it is possible to have multiple bid contract conditions. For U.S data, the general contractor bid date is used as the project's main bid date.						
Attribute	bute Data Type Description Valid Examples/Values					
BidType	XML = dls.BidType DB = VARCHAR(180)	Type of contracting method being used in the construction of the building.	Open Bidding Invited Bidding Prequalified Bidders Negotiated			
Child Elements	Data Type	Description	Valid Examples/Values			



Companies/Company

Notes:

- To determine the specific company role for a project, the value in the Role field defines the
 company role for a project participant. If the Role field is populated, the company in
 question is playing a role for the project. Some of the values for the company role include
 General Contractor, Owner, and Architect. If the value in the Role field is null, the company
 is not playing a role on the project.
- To derive the Bidders List from a CRM Integration export file, the **BiddingRole** field determines the Bidder's List for a project. All companies with a non-null value in the **BiddingRole** field are a bidder for the project. If the value in the **BiddingRole** field is null, there are no bidders for the project.

/Projects/Project/Companies/Company Definition: Defines the company information for a project. Companies listed here are both project participants and bidders.				
Attribute	Data Type	Description	Valid Examples/Values	
Role	XML = dls.Role DB = VARCHAR(180)	Role the company is playing on the project Note: The Role, TenderRole, and BiddingRole are all mutually exclusive. You can only select one of these values.	General Contractor See the Classification parent/child values in the following section for more information about Role values. See the Note at the start of this section for more information.	
BiddingRole	XML = dls.Role DB = VARCHAR(180)	Role for which the company is bidding on the project. The code represents a generic or detailed account of what is involved in the contract. Note: The Role and BiddingRole are mutually exclusive. You can only have one or the other.		
Name	XML = dls.Name DB = VARCHAR(255)	Name of the company	Turner Construction	
URL	XML = dls.URL DB = VARCHAR(255)	Company Detail page URL for this company	URL example = https://insight.cmdgroup.com/Compa ny/Home/CompanyInformation?1000 3254521/1	
LastUpdate	xs:date	Date the company was last updated. The LastUpdate field is the last date that the project was edited. It may not be the last significant update date.	XML format = YYYY-MM-DD XML example = 2006-03-29	
CompanyID	xs:long	Identifier assigned to the company.	51095 Note: For companies, both DataSourceID and CompanyID must be used in combination to identify	



Attribute	Data Type	Description	Valid Examples/Values		
			the entity (company). Example: 32654		
DataSourceID	xs:string		Values: • U.S = US • Canada = CAN		
UpdateText	xs:string				
Child Elements		Description	Valid Examples/Values		
Contact		See /Companies/Company/Contacts/Conta	ct for more information.		
Addresses		See /Companies/Company/Addresses/Address for more information.			
Phones		See /Companies/Company/Phones/Phone	See /Companies/Company/Phones/Phone for more information.		
Email		See /Companies/Company/Email for more information.			
Website		See /Companies/Company/Website for more information.			
ParticipantRole		See /Companies/Company/ParticipantRoles/ParticipantRole for more information			
PlanHolders		See /Companies/Company/PlanHolders/PlanHolder for more information.			
BidderRoles		See /Companies/Company/BidderRoles/Bid	for more information.		
ClassificationTyp	es	See /Companies/Company/ClassificationTypes/ClassificationType for more information.			
CompanySumma	arizations	See /Companies/CompanySummarizations/CompanySummary for more information.			
ParentCompany Se		See /Companies/Company/ParentCompan	See /Companies/Company/ParentCompany for more information.		
Phones	hones See /Companies/Company/ParentCompany/Phones/Phone for more infor		y/Phones/Phone for more information.		
ParentCompany	Address	See /Companies/Company/ParentCompany/ParentCompanyAddress for more information.			

Classification parent/child values

The *Classification* of a company is the function that the company generally performs and is not necessarily the *Role* that the company plays in the project. The following table contains the parent/child values for *Classification*.

Classification	
Parent	Child
ARCHITECT	Architect
	Architect's Representative
	Designer
	Landscape Architect
	Golf Course Designer
	Water Feature Designer
GENERAL CONTRACTOR	General Contractor



Classification	
Parent	Child
	Construction Manager
	Negotiating General Contractor
	Design Build Contractor
BUILDING OWNER: BUILDING USER	Developer
OSER	Owner
	Owner's Rep
	Tenant
ENGINEERS	Acoustical Engineer
	Civil Engineer
	Consultant
	Electrical Engineer
	Engineer
	Food Service Designer
	Mechanical Engineer
	Geotechnical Consultant
	HVAC Engineer
	Interior Designer
	Landscape Designer
	Mechanical and Electrical Engineer
	Structural, Mechanical, and Electrical Engineer
	Plans Representative
	Plumbing Engineer
	Specification Consultant
	Structural Engineer
EQUIPMENT SUPPLIERS	Construction Equipment
	Fuels
NUMERIC BID PACKAGES	Bid Package 1 to Bid Package 99
ALPHA BID PACKAGES	Bid Package A to Bid Package Z
SUBCONTRACTORS - DIVISION 1	Fencing
	Building Maint., Cleanup
	Equip. Rentals, Scaffolding
	Financial Services
	Misc. General Requirements



Classification	
Parent	Child
	Foundation Contractor
	Paving
	Demolition
	Asbestos Removal
	Site Work
SUBCONTRACTORS – DIVISION 3	Concrete
	Precast Concrete
	Concrete Forms
	Reinforcing Steel
SUBCONTRACTORS - DIVISION 4	Masonry
	Masonry Restoration
SUBCONTRACTORS - DIVISION 5	Structural Steel
SUBCONTRACTORS - DIVISION 6	Carpentry
SUBCONTRACTORS - DIVISION 7	Waterproofing
	Insulation
	Roofing
SUBCONTRACTORS - DIVISION 8	Doors
	Windows
	Hardware
	Glass
SUBCONTRACTORS - DIVISION 9	Interior Finishes
	Plaster and Stucco
	Drywall
	Tile
	Acoustical Ceilings
	Flooring
	Painting and Wall Coverings
SUBCONTRACTORS - DIVISION 10	Bathroom Partitions and Accessories
	Other Equipment
	Moveable Partitions
	I .



Classification	
Parent	Child
	Signage
SUBCONTRACTORS - DIVISION 11	Bank Equipment
	Laboratory Equipment
	Sewage Treatment Equipment
	Kitchen Equipment
	Medical Equipment
	Athletic Equipment
SUBCONTRACTORS - DIVISION 12	Window Coverings
	Furniture
	Seating
SUBCONTRACTORS - DIVISION 13	Insulated Cold Storage
	Swimming Pools
	Storage Tanks
SUBCONTRACTORS - DIVISION 14	Elevators and Escalators
	Conveyors
SUBCONTRACTORS - DIVISION 15	Mechanical Contractor
	Plumbing Contractor
	HVAC Contractor
	Refrigeration Contractor
	Temperature Controls
	Fire Sprinklers
	Thermal Insulation
	Sheet Metal
SUBCONTRACTORS - DIVISION 16	Electrical Contractor
	Lighting
	Alarms and Communication
	Ventilation Contractor
	Heating Contractor
	Fire Protection
	l



/Companies/Company/Contacts/Contact

<u>Note</u>: The address and phone number data for a contact can be derived from the *company* section.

/Projects/Project/Companies/Company/Contacts/Contact Definition: Defines the contact information for the company.				
Attribute	Data Type	Description	Valid Examples/Values	
Name	XML = dls.ContactName DB = VARCHAR(100)	Name of the contact associated with the company for this project.	John Smith	
LinkedInURL		The LinkedIn URL for the contact	http://www.linkedin.com/pub/ candy-jacobs/3a/18b/937	
Child Elements	Data Type	Description	Valid Examples/Values	
Email	XML=dls.Email	The email for the company.	These three values are set to	
PhoneNumber	XML=dls.PhoneNu mber	The phone number for the company.	0, are nullable in the database and do not require a value.	
Extension	xs:string	The extension of the phone number for the company.		

/Companies/Company/Addresses/Address

/Projects/Project/Companies/Company/Addresses/Address Definition: Defines the company address.			
Attribute	Data Type	Description	Valid Examples/Values
Address Type	XML = dls.AddressType DB = VARCHAR(180)	Address type for the company	Street Mailing Default = Street
Child Elements	Data Type	Description	Valid Examples/Values
AddressLine1	XML = dls.AddressLine DB = VARCHAR(128)	Company address	283 Main Street
AddressLine2	XML = dls.AddressLine DB = VARCHAR(128)	Second line for the address	Not applicable
City	XML = dls.City DB = VARCHAR(50)	City or municipal for the company	Atlanta
StateProvince	XML = dls.State DB = VARCHAR(50)	Abbreviation representing the state or province for the company	GA



/Projects/Project/Companies/Company/Addresses/Address Definition: Defines the company address.				
ZipPostalCode	XML = dls.Zip DB = VARCHAR(20)	Postal or zip code for the company. Note that the default setting is zero (0) and some values for this field can be blank.	30309	
County	XML = dls.County DB = VARCHAR(60)	Name representing the county for the company	Fulton	
CountryRegion	XML = dls:Country DB = VARCHAR(120)	Name representing the country or region for the company	US	

/Companies/Company/Phones/Phone

•	/Projects/Project/Companies/Company/Phones/Phone Definition: Defines the phone information for companies associated with a project.				
Attribute	Data Type	Description	Valid Examples/Values		
PhoneType	XML = dls.PhoneType DB = VARCHAR(180)	Phone type for the company	Example for Phone Type: Company Phone Number Contact Phone Number Fax Phone Number Cell Phone Number Home Phone Number Other Phone Number		
Child Elements	Data Type	Description	Valid Examples/Values		
Phone	XML = dls.PhoneNumber DB = VARCHAR(100)	Phone number of the company	770-000-0000		

/Companies/Company/Email

/Projects/Project/Companies/Company/Email Definition: Defines the email for the company associated with a project.				
Attribute	Data Type	Data Type Description Valid Examples/Values		
Email	XML = dls.Email	Email for the company		
Child Elements Data Type Description Valid Examples/Values				



/Companies/Company/Website

/Projects/Project/Companies/Company/Website Definition: Defines the website address for the company associated with a project.				
Attribute	Data Type	Data Type Description Valid Examples/Values		
Website	XML=dls.URL	The web address for the company.		
Child Elements Data Type Description Valid Examples/Values				

/Companies/Company/ParticipantRoles/ParticipantRole

/Projects/Project/Companies/Company/ParticipantRoles/ParticipantRole Definition: Defines the company role associated with a project.					
Attribute Data Type Description Valid Examples/Values					
RoleClassification		The role classification for the company.			
RoleStatus		The role status for the company	Awarded		
Child Elements Data Type Description Valid Examples/Values					

/Companies/Company/PlanHolders/PlanHolder

/Projects/Project/Companies/Company/PlanHolders/PlanHolder Definition: Defines the role associated with the project plan holder.					
Attribute	ribute Data Type Description Valid Examples/Values				
RoleClassification		The role classification for the plan holder.			
ContactName	Type=xs:string	The name of the plan holder contact person for the company.			
Child Elements Data Type Description Valid Examples/Values					

/Companies/Company/BidderRoles/BidderRole

Note: Bidding information must be cross-referenced with the BiddingRole field to determine the BidValue, BidRank, BidWithdrawDate and BidCreateDate for each bidding company.



/Projects/Project/Companies/Company/BidderRoles/BidderRole Definition: Defines the bid information for all bidding companies.				
Attribute	Data Type	Description	Valid Examples/Values	
BidderClassification	xs:string	Classification of the bidder.		
BidValue	XML = dls.Currency DB = VARCHAR(15)	Amount of the bid submitted by the bidder	3344550	
BidRank	xs:unsignedInt	Reflects the bid value order from lowest to highest where the lowest = 1.	1, 2, 3	
BidWithdrawDate	xs:date	Not applicable	Not applicable	
BidCreateDate	xs:date			
Child Elements	Data Type	Description	Valid Examples/Values	

/Companies/Company/ClassificationTypes/ClassificationType

/Projects/Project/Companies/Company/ClassificationsTypes/ClassificationType Definition: Defines the classification type of the Company.			
Attribute	Data Type	Description	Valid Examples/Values
ClassificationType	XML = dls.ClassificationType DB = VARCHAR(180)	The company's type of business, including the classification of the services delivered in the market.	Accommodation/Hospitality Utilities Municipal Govt Services See dls:ClassificationType line in the export schema for a complete list of the stage examples.
Child Elements	Data Type	Description	Valid Examples/Values
Rank	xs: unsignedInt	Ranking of the subcategory classification representing the proportion of the end use of project.	1 2
Туре	XML = dls.ClassificationType DB = VARCHAR(180)	Service provided by the organization.	Public Owner See dls:ClassificationType line in the export schema for a complete list of the stage examples.



/Companies/CompanySummarizations/CompanySummary

/Projects/Project/Companies/Company/CompanySummarizatons/CompanySummary			
Attribute	Data Type	Description	Valid Examples/Values
CompanySummaryDate	xs:date	The date the company merged into the current company.	2009-02-26
Summary	XML = dls.Summary DB=VARCHAR(255)	Lists companies that have merged into the current company.	Company merged: 999999 BEST ARCHITECTS
Child Elements	Data Type	Description	Valid Examples/Values

/Companies/Company/ParentCompany

/Projects/Project/Companies/Company/ParentCompany			
Attribute	Data Type	Description	Valid Examples/Values
Child Elements	Data Type	Description	Valid Examples/Values
DataSource	xs:string		US
Companyld	xs:string		1000240000
CompanyType	xs:string	The primary role of the company	General Contractor
CompanyHierarchyType	xs:string		HQ
Name	xs:string	The name of the company	
Phones	See /ParentCompany/	Phones for more information.	
Email	dls.Email		email.name@business.com
Website	dls.URL		www.biz.com
ParentCompanyAddress	See /ParentCompany/ParentCompanyAddress for more information.		

/Companies/Company/ParentCompany/Phones/Phone

/Projects/Project/Companies/Company/ParentCompany/Phones/Phone				
Attribute Data Type Description Valid Examples/Values				
PhoneType	dls.PhoneType		Phone Fax	
Child Elements	Data Type	Description	Valid Examples/Values	
PhoneNumber	dls.PhoneNumber	Parent company phone number	4011011010	



/Companies/Company/ParentCompany/ParentCompanyAddress

/Projects/Project/Companies/Company/ParentCompany/ParentCompanyAddress Definition: Defines the address of the parent company.				
Attribute Data Type Description Valid Examples/N				
Child Elements	Data Type	Description	Valid Examples/Values	
AddressLine1	dls.AddressLine	The first line address for the company.	26 College Drive	
AddressLine2	dls.AddressLine	The second address line for the company.	Suite 101	
City	dls.City	The city for the company.	Decatur	
State	dls.State	The state for the company.	GA	
PostalCode	dls.PostalCode	The postal code for the company.	03301-7407	
CountyName	dls.CountyName	The country for the company.	Dekalb	
Country	dls.Country	The country for the company.	US	

/Users/User/Queries/Query

/Projects/Project/Users/User/Queries/Query Definition: Defines the				
Attribute	Data Type	Description	Valid Examples/Values	
QueryID	xs:string	System generated query ID #.	100	
QueryName	xs:string	User name for search	MyProjectConcreteSearch	
DocCenterURL	dls.URL	URL location in Document Center		
Child Elements	Data Type	Description	Valid Examples/Values	

/Users/User/User

/Projects/Project/Users/User Definition: Defines the			
Attribute	Data Type	Description	Valid Examples/Values
UserID	xs:string	System ID of user.	
UserName	xs:string	Login/email address of user	Name@biz.com
UserFullName	xs:string	First and last name of user	Ben Smith
ProjectFlaggedforExport	xs:boolean XML = dls.Summary DB = VARCHAR(255)	Identifies what has been updated since the last export.	An example for the summary is New Project was Found.
Child Elements	Data Type	Description	Valid Examples/Values



/Users/User/User

/Projects/Project/Users/User Definition: Defines the			
Attribute	Data Type	Description	Valid Examples/Values
UserID	xs:string	System ID of user.	
UserName	xs:string	Login/email address of user	Name@biz.com
UserFullName	xs:string	First and last name of user	Ben Smith
ProjectFlaggedforExport	xs:boolean XML = dls.Summary DB = VARCHAR(255)	Identifies what has been updated since the last export.	An example for the summary is New Project was Found.
Child Elements	Data Type	Description	Valid Examples/Values

/UpdateSummarizations/UpdateSummary

/Projects/Project/UpdateSummarizations/UpdateSummary Definition: Defines the update summary information or project history for a project.						
Attribute	Data Type	Data Type Description Valid Examples/Values				
UpdateSummaryDate	xs:date	Identifies the update summary date for a project.	XML format = YYYY-MM-DD XML example = 2006-03-29			
Summary	XML = dls.Summary DB = VARCHAR(255)	Identifies what has been updated since the last export.	Plans were added / updated.			
Child Elements	Data Type	Description	Valid Examples/Values			



/PlanSpec/PlanRoom

/Projects /Project/PlanSpec/PlanRoom Definition: Defines the plans and specifications information for a project.			
Attribute	Data Type	Description	Valid Examples/Values
Bin	xls:string	The type of document	Plans
Name	XML=dls.PlanRoom	The name of the plan/spec.	Alberta Plan Room
URL	XML = dls.URL DB = VARCHAR(255)	URL to the Plans and Specs for this project	URL format = http://www.reedconnect.com/ default.aspx?link= <encrypted string=""> URL example = http://www.reedconnect.com/d efault.aspx?link=NSwxNDAwL DEwMDAyNDI3Nzc%3d</encrypted>
Child Elements	Data Type	Description	Valid Examples/Values

/PlanSpec/DocCenterUrl

/Projects /Project/PlanSpec/DocCenterURL Definition: Defines the URL for the Document Center location of the plans and specs.				
Attribute	Data Type	Description	Valid Examples/Values	
Deposit	xs:string	Deposit and refund information for the project	May be required.	
URL	XML = dls.URL DB = VARCHAR(255)	URL to the Plans and Specs page for this project	URL format = https:// insight.cmdgrup.com/ default.aspx?link= <encrypted string=""></encrypted>	
			URL example = https://insight.cmdgrup.com/Pr oject/Home/ProjectInformation/454875421/1	
From	XML = dls.Role DB = VARCHAR(180)	The project role that is distributing plans on the project contract	Architect Owner See dls:Role line in the export schema for a complete list of the stage examples.	
Child Elements	Data Type	Description	Valid Examples/Values	



/Details/Detail

/Projects/Project/Details/Detail Definition: Defines the project details information for a project.			
Attribute	Data Type	Description	Valid Examples/Values
DetailType	XML = dls.DetailType DB = VARCHAR(180)	Code representing the detail information reported on a project Note: This value combines the values DetailText and DetailType from the previous CRM release.	ProjectStatusNotes
Child Elements	Data Type	Description	Valid Examples/Values

/Materials/Material

/Projects/Project/Materials/Material Definition: Defines the materials or Master Format CSI divisions for a project.				
Attribute	Data Type	Data Type Description Valid Examples/Values		
Code	xs:long	MasterFormat code representing materials involved in the project.	33	
Child Elements	Data Type	Description	Valid Examples/Values	

/RSMeansMaterialDivisions/Division/Materials/Material

/Projects/Project/RSMeansMaterialDivisions/Division/Materials/Material Definition: Defines the RSMeans Material Division numbers associated with the project.				
Attribute	Data Type	Data Type Description Valid Examples/Values		
Code	xs:long	The code for the material	347	
Child Elements	Data Type	Description	Valid Examples/Values	

/RSMeansMaterialDivisions/Division/Materials/

/Projects/Project/RSMeansMaterialDivisions/Division/Materials Definition: Defines the RSMeans Material Division information associated with the project.				
Attribute Data Type Description Valid Examples/Values				
Description	XML = dls.Description	The description of the material. For a list of RSMeans Material names and codes, see Appendix A – Material Demand CSI codes	Concrete	
Code	xs:long	The code for the material	3	
MaterialCostValue	xs:decimal	The total cost minus installation	030212	



		cost.	
InstallationCostValue	xs:decimal	The cost of the installation.	0.0305
TotalCostValue	xs:decimal	The total cost of the item including installation.	0.0520
Child Elements	Data Type	Description	Valid Examples/Values

/Notes/Note

/Projects/Project/Notes Definition: Defines the notes section of the project details.				
Attribute	Data Type	Description	Valid Examples/Values	
UserID	xs:string	The ConstructConnect Id of the user.	System generated name.	
UserName	xs:string	The ConstructConnect name of the user.	name@business.com	
Noteld	xs:string	Numeric ID of the note	12	
NoteText	xs:string	The body text of the note.	Great project to follow.	
CreateDate	xs:DateTime	The date the note is created	2014-07-18T15:49:40.633	
ModifyDate	xs:DateTime	The date of modifications to the note.		
Child Elements	Data Type	Description	Valid Examples/Values	

/List Date

/Projects/Project/List Date Definition: Defines the unique identity of the project				
Attribute	Data Type Description Valid Examples/Values			
ListDate	xs:date	Unique system assigned project ID. Note: This value is formerly Project/Parameters/Parameter/RecordDate		
			2014-08-27	
Child Elements	Data Type	Description	Valid Examples/Values	

/ProjectID

/Projects/ProjectID				
Definition: Defines the un	Definition: Defines the unique identity of the project			
Attribute	Data Type	Description	Valid Examples/Values	
ProjectID	xs:long	Unique system assigned project ID	1000015959	



Child Elements	Data Type	Description	Valid Examples/Values

/DataSourceID

/Projects/Project/DataSourceID Definition: Defines the source of the project.			
Attribute	Data Type	Description	Valid Examples/Values
DataSourceID	xs:string	Values: • 1 = US • 2 = CAN	Example: 1 Note: For companies, both DataSourceID and CompanyID must be used in combination to identify the entity (company).
Child Elements	Data Type	Description	Valid Examples/Values

/Title

/Projects/Project/Title Definition: Defines the name of the project.			
Attribute	Data Type	Description	Valid Examples/Values
Title	XML = dls.Title DB = VARCHAR(180)	Title and name of the project record	WATER CONTROL PLANT ALTS: Arlington Water Pollution Control Plant
Child Elements	Data Type	Description	Valid Examples/Values

/Stage

/Projects/Project/Stage Definition: Defines the stage of the project.			
Attribute	Data Type	Description	Valid Examples/Values
Stage	XML = dls.Stage DB = VARCHAR(180)	Stages of planning, bidding, or postbid that the project is in currently	Planning Proposed Pending Role Proposals Due Architect Selection to Begin Master Planning Conceptual Drawings
Child Elements	Data Type	Description	Valid Examples/Values

/URL

/Projects	/Project	/Stage
-----------	----------	--------



Definition: Defines the URL for the project listing in Insight.			
Attribute	Data Type	Description	Valid Examples/Values
URL	XML = dls.URL DB = VARCHAR(255)	URL to the Project Detail page for this project	URL format = http://www.reedconnect.com/d efault.aspx?link= <encrypted string=""> URL example = http://www.reedconnect.com/d efault.aspx?link=NSwxNDAwL DEwMDAyNDI3Nzc%3d</encrypted>
Child Elements	Data Type	Description	Valid Examples/Values

/UpdateDate

/Projects/Project/UpdateDate Definition: Defines the date the project listing was last updated.			
Attribute Data Type Description Valid Examples/Values			Valid Examples/Values
Project Event		Provides Event details, including date and time.	2019-11-11
Child Elements	Data Type	Description	Valid Examples/Values

/ProjectParentID

/Projects/Project/ProjectParentID Definition: Defines the ID of the parent project to the current project.			
Attribute	Data Type Description Valid Examples/Values		
ProjectParentID	xs:long	ID of the project parent that is related to this project	9058762
Child Elements	Data Type	Description	Valid Examples/Values

/IsProspective

This indicates if a project has been verified by the RCD source management team. Projects in this category have not been verified but are included here for prospective use.

/Projects/Project/IsProspective			
Attribute	Data Type	Description	Valid Examples/Values
IsProspective	xs:boolean	This is formerly: Project/IsUnverified	IsProspective=TRUE
Child Elements	Data Type	Description	Valid Examples/Values



/UpdateText

/Projects/Project/UpdateText			
Attribute	Data Type	Description	Valid Examples/Values
UpdateText	xs.string	The most recent information on a project. Are concatenated when multiple updates are present.	
Child Elements	Data Type	Description	Valid Examples/Values



Buyer Activity Report

Introduction

This section contains a list and description of the elements that are included in the Buyer Activity Report XML file.

BarData

BarData			
Attribute	Description	Valid Examples/Values	
Child Elements	Description	Valid Examples/Values	
Users	Data for the company viewing the Buyer Activity Report. For more information, see /User and /Trade.		
BuyerInfo	Data for the subcontractors that have viewed the projects associated with Subs that have viewed shown interest in		
	For more information, see /BuyerContact.		

/User

BarData/Users/User			
Attribute	Data Type	Description	Valid Examples/Values
Child Elements	Data Type	Description	Valid Examples/Values
UserEmail	xs:string	The company email for the user.	
UserID		The internal CMD ID of the user.	

/Trade

BarData/Users/User/S	arData/Users/User/SelectedTrades/Trade		
Attribute	Data Type	Description	Valid Examples/Values
Child Elements	Data Type	Description	Valid Examples/Values
CSICode	xs:string	The CSI codes and descriptions for	
CSIDescription		the company user. These map to the companies returned in the Buyer Activity Report.	



/BuyerContact

Attribute	Data Type	Description	Valid Examples/Values
Child Elements	Data Type	Description	Valid Examples/Values
BuyerContactID	xs:string	The identifier for the buyer. This value is and the child element BuyerSource constitute the unique identifier for this record.	
BuyerSource	DB = VARCHAR(10)	The ConstructConnect source of the BAR data.	Example: iSqFt CMD
ContactName	DB = VARCHAR(500)	The name of the contact for the company.	
CompanyName	DB = VARCHAR(255)	The name of the company.	
Phone	xs:string DB = VARCHAR(15)	The phone number for the contact.	
Email	xs:string DB = VARCHAR(200)	The contact's email.	
BusinessType		The company business type.	Examples:
CompanyAddress	DB = VARCHAR(800)	The address of the company.	
SelectedTrades	DB = VARCHAR(800)	The CSI Division trades and codes for the company.	
Projects		The projects associated with the company. Includes the external Project Name Project ID Activity Level rating Date of last company activity on the project.	
YearEstablished	xs:integer	The year the company was established.	
AverageJobSize	DB = VARCHAR(50)	The typical job size for the company.	
Sector	DB = VARCHAR(10)	The sector for the company, either public, private or both.	 Public – Is public. Private – Is private. Both – Is both.
MWBE	xs:string	Indicates if the company is a minority or woman owned	Yes – Is MWBE.No – Is not MWBE.



	business.	
Union	Indicates if the company is a union	Yes – Is union.
	shop.	 No – Is not union.
Licensed	Indicates if the company is licensed	Yes – Is licensed.
	for the work performed.	 No – Is not licensed.
Insured	Indicates if the company is insured	Yes – Is insured.
	for the work performed.	No – Is not insured.



Appendix A – Material Demand CSI codes

Introduction

This section contains a list of the CSI codes and descriptions used in the Material Demand project cost models.

CSI Code	Description
111	Summary Of Work
121	Allowances
131	Project Management And Coordination
132	Construction Progress Documentation
141	Regulatory Requirements
145	Quality Control
151	Temporary Utilities
152	Construction Facilities
154	Construction Aids
155	Vehicular Access and Parking
156	Temporary Barriers and Enclosures
158	Project Identification
171	Examination and Preparation
174	Cleaning and Waste Management
176	Protecting Installed Construction
191	Commissioning
193	Facility Maintenance
221	Surveys
232	Geotechnical Investigations
241	Demolition
242	Removal And Salvage Of Construction Materials
243	Structure Moving
256	Site Containment
258	Snow Control
265	Underground Storage Tank Removal
281	Transportation And Disposal Of Hazardous Materials
282	Asbestos Remediation
283	Lead Remediation
285	Mold Remediation
291	Chemical Sampling, Testing And Analysis
301	Maintenance Of Concrete



305 Common Work Results For Concrete 311 Concrete Forming 315 Concrete Accessories 321 Reinforcement Bars 322 Fabric And Grid Reinforcing 323 Stressed Tendon Reinforcing 324 Fibrous Reinforcing 330 Cast-In-Place Concrete 331 Structural Concrete 335 Concrete Finishing 337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 346 Precast Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 365 Concrete Office Office Office Office Office 366 Concrete Office 377 Maintenance Office Masonry 388 Concrete Boring 389 Concrete Unit Masonry 380 Concrete Unit Masonry 381 Clay Unit Masonry 382 Concrete Unit Masonry 383 Glass Unit Masonry 384 Adobe Unit Masonry 385 Adobe Unit Masonry 386 Adobe Unit Masonry 387 Adobe Unit Masonry 388 Stone Masonry 389 Adobe Unit Masonry 380 Adobe Unit Masonry 381 Adobe Unit Masonry 382 Adobe Unit Masonry 383 Adobe Unit Masonry 384 Adobe Unit Masonry 385 Adobe Unit Masonry 386 Adobe Unit Masonry 387 Adobe Unit Masonry 388 Adobe Unit Masonry 389 Adobe Unit Masonry 380 Adobe Unit Masonry 381 Adobe Unit Masonry 382 Adobe Unit Masonry 383 Adobe Unit Masonry 384 Adobe Unit Masonry 385 Adobe Unit Masonry 386 Adobe Unit Masonry 387 Adobe Unit Masonry 388 Adobe Unit Masonry 389 Adobe Unit Masonry 380 Adobe Unit Masonry 381 Adobe Unit Masonry 382 Adobe Unit Masonry 383 Adobe Unit Masonry 384 Adobe Unit Masonry 385 Adobe Unit Masonry 386 Adobe Unit Masonry 387 Adobe Unit Masonry 388 Adobe Unit Masonry 389 Adobe Unit Masonry 380 Adobe Unit Masonry 381 Adobe Unit Masonry 382 Adobe Unit Masonry 383 Adobe Unit Masonry 384 Adobe Unit Masonry 385 Adobe Unit Masonry 386 Adobe Unit Masonry 387 Adobe Unit Masonry 388 Adobe Unit Masonry 389 Adobe Unit Masonry 380 Adobe Unit Masonry 380 Adobe Unit Masonry 381 Adobe Unit Masonry		
315 Concrete Accessories 321 Reinforcement Bars 322 Fabric And Grid Reinforcing 323 Stressed Tendon Reinforcing 324 Fibrous Reinforcing 330 Cast-In-Place Concrete 331 Structural Concrete 335 Concrete Finishing 337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 346 Precast Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 365 Concrete Of Masonry 405 Common Work Results For Masonry 405 Common Work Results For Masonry 420 Concrete Unit Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 426 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	305	Common Work Results For Concrete
321 Reinforcement Bars 322 Fabric And Grid Reinforcing 323 Stressed Tendon Reinforcing 324 Fibrous Reinforcing 330 Cast-In-Place Concrete 331 Structural Concrete 335 Concrete Finishing 337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 342 Precast Architectural Concrete 343 Precast Concrete 344 Precast Concrete 345 Precast Architectural Concrete 346 Precast Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 350 Lightweight Concrete Roof Insulation 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 365 Concrete Cutting 366 Concrete Cutting 367 Concrete Cutting 368 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 405 Conrecte Unit Masonry 420 Clay Unit Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 426 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 448 Stone Masonry 450 Masonry Fireplaces 471 Manufactured Brick Masonry	311	Concrete Forming
322 Fabric And Grid Reinforcing 323 Stressed Tendon Reinforcing 324 Fibrous Reinforcing 330 Cast-In-Place Concrete 331 Structural Concrete 335 Concrete Finishing 337 Specialty Placed Concrete 338 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 346 Precast Architectural Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 427 Concrete Unit Masonry 428 Glass Unit Masonry 429 Glass Unit Masonry 420 Multiple-Wythe Unit Masonry 421 Dry-Placed Stone 433 Stone Masonry 444 Dry-Placed Stone 443 Stone Masonry 455 Masonry Fireplaces 471 Manufactured Brick Masonry	315	Concrete Accessories
323 Stressed Tendon Reinforcing 324 Fibrous Reinforcing 330 Cast-In-Place Concrete 331 Structural Concrete 335 Concrete Finishing 337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 346 Precast Architectural Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 448 Stone Masonry 450 Refractory Brick Masonry 451 Flue Liner Masonry 453 Masonry Fireplaces 471 Manufactured Brick Masonry	321	Reinforcement Bars
324 Fibrous Reinforcing 330 Cast-In-Place Concrete 331 Structural Concrete 335 Concrete Finishing 337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 346 Precast Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Cutting 380 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 427 Multiple-Wythe Unit Masonry 448 Stone Masonry 450 Refractory Brick Masonry 451 Flue Liner Masonry 453 Masonry Fireplaces 471 Manufactured Brick Masonry	322	Fabric And Grid Reinforcing
330 Cast-In-Place Concrete 331 Structural Concrete 335 Concrete Finishing 337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 346 Precast Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Cutting 386 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 426 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 456 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	323	Stressed Tendon Reinforcing
331 Structural Concrete 335 Concrete Finishing 337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 346 Precast Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 426 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 448 Stone Masonry 450 Refractory Brick Masonry 451 Flue Liner Masonry 452 Refractory Brick Masonry 453 Masonry Fireplaces 471 Manufactured Brick Masonry	324	Fibrous Reinforcing
335 Concrete Finishing 337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 426 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 448 Stone Masonry 450 Refractory Brick Masonry 451 Flue Liner Masonry 452 Refractory Brick Masonry 453 Masonry Fireplaces 471 Manufactured Brick Masonry	330	Cast-In-Place Concrete
337 Specialty Placed Concrete 339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 428 Stone Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 452 Masonry Fireplaces 471 Manufactured Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	331	Structural Concrete
339 Concrete Curing 341 Precast Structural Concrete 345 Precast Architectural Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 426 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 448 Stone Masonry 450 Refractory Brick Masonry 451 Flue Liner Masonry 452 Masonry Fireplaces 453 Masonry Fireplaces 454 Masonry Fireplaces 457 Masonry Fireplaces 471 Manufactured Brick Masonry	335	Concrete Finishing
341 Precast Structural Concrete 345 Precast Architectural Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Cutting 380 Concrete Cutting 381 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 426 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 428 Stone Masonry 449 Stone Masonry 450 Refractory Brick Masonry 451 Flue Liner Masonry 452 Masonry Fireplaces 453 Manufactured Brick Masonry	337	Specialty Placed Concrete
345 Precast Architectural Concrete 347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 385 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 428 Stone Masonry 449 Stone Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 452 Masonry Fireplaces 451 Masonry Fireplaces 451 Masonry Fireplaces 471 Manufactured Brick Masonry	339	Concrete Curing
347 Site-Cast Concrete 348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 428 Stone Masonry 449 Stone Masonry 450 Flue Liner Masonry 451 Flue Liner Masonry 452 Refractory Brick Masonry 453 Masonry Fireplaces 454 Masonry Fireplaces 457 Masonry Fireplaces 458 Manufactured Brick Masonry	341	Precast Structural Concrete
348 Precast Concrete Specialties 351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 428 Stone Masonry 440 Stone Masonry 451 Flue Liner Masonry 451 Flue Liner Masonry 452 Refractory Brick Masonry 453 Refractory Brick Masonry 454 Refractory Brick Masonry 455 Masonry Fireplaces 471 Manufactured Brick Masonry	345	Precast Architectural Concrete
351 Cast Roof Decks 352 Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 455 Masonry Fireplaces 471 Manufactured Brick Masonry	347	Site-Cast Concrete
Lightweight Concrete Roof Insulation 354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	348	Precast Concrete Specialties
354 Cast Underlayment 361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 427 Multiple-Wythe Unit Masonry 43 Stone Masonry 441 Dry-Placed Stone 443 Stone Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	351	Cast Roof Decks
361 Cementitious Grouting 362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	352	Lightweight Concrete Roof Insulation
362 Non-Shrink Grouting 363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	354	Cast Underlayment
363 Epoxy Grouting 364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	361	Cementitious Grouting
364 Injection Grouting 381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	362	Non-Shrink Grouting
381 Concrete Cutting 382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	363	Epoxy Grouting
382 Concrete Boring 401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	364	Injection Grouting
401 Maintenance Of Masonry 405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	381	Concrete Cutting
405 Common Work Results For Masonry 421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	382	Concrete Boring
421 Clay Unit Masonry 422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	401	Maintenance Of Masonry
422 Concrete Unit Masonry 423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	405	Common Work Results For Masonry
423 Glass Unit Masonry 424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	421	Clay Unit Masonry
424 Adobe Unit Masonry 425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	422	Concrete Unit Masonry
425 Adobe Unit Masonry 427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	423	Glass Unit Masonry
427 Multiple-Wythe Unit Masonry 441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	424	Adobe Unit Masonry
441 Dry-Placed Stone 443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	425	Adobe Unit Masonry
443 Stone Masonry 451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	427	Multiple-Wythe Unit Masonry
451 Flue Liner Masonry 454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	441	Dry-Placed Stone
454 Refractory Brick Masonry 457 Masonry Fireplaces 471 Manufactured Brick Masonry	443	Stone Masonry
457 Masonry Fireplaces 471 Manufactured Brick Masonry	451	Flue Liner Masonry
471 Manufactured Brick Masonry	454	Refractory Brick Masonry
-	457	Masonry Fireplaces
	471	Manufactured Brick Masonry
472 Cast Stone Masonry	472	Cast Stone Masonry



473	Manufactured Stone Masonry
501	Maintenance of Metals
505	Common Work Results For Metals
512	Structural Steel Framing
514	Structural Aluminum Framing
515	Wire Rope Assemblies
521	Steel Joist Framing
531	Steel Decking
535	Raceway Decking Assemblies
541	Structural Metal Stud Framing
542	Cold-Formed Metal Joist Framing
544	Cold-Formed Metal Trusses
551	Metal Stairs
552	Metal Railings
553	Metal Gratings
554	Metal Floor Plates
555	Metal Stair Treads and Nosings
558	Formed Metal Fabrications
571	Decorative Metal Stairs
573	Decorative Metal Railings
575	Decorative Formed Metal



CSI Code	Description
605	Common Work Results For Wood, Plastics, And Composites
611	Wood Framing
612	Structural Panels
613	Heavy Timber Construction
615	Wood Decking
616	Sheathing
617	Shop-Fabricated Structural Wood
618	Glued-Laminated Construction
622	Millwork
625	Prefinished Paneling
626	Board Paneling
643	Wood Stairs And Railings
644	Ornamental Woodwork
648	Wood Frames
649	Wood Screens And Exterior Wood Shutters
651	Structural Plastic Shapes And Plates
652	Plastic Structural Assemblies
663	Plastic Railings
665	Plastic Simulated Wood Trim
701	Operation and Maintenance Of Thermal And Moisture Protection
705	Common Work Results For Thermal And Moisture Protection
711	Damproofing
712	Built-Up Bituminous Waterproofing
713	Sheet Waterproofing
716	Cementitious And Reactive Waterproofing
717	Bentonite Waterproofing
719	Water Repellents
721	Thermal Insulation
722	Roof And Deck Insulation
724	Exterior Insulation And Finish Systems
725	Weather Barriers
726	Vapor Retarders
731	Shingles And Shakes
732	Roof Tiles
733	Natural Roof Coverings
741	Roof Panels
742	Wall Panels
744	Faced Panels
746	Siding
751	Built-Up Bituminous Roofing



752	Modified Bituminous Membrane Roofing
753	Elastomeric Membrane Roofing
754	Thermoplastic Membrane Roofing
756	Fluid-Applied Roofing
757	Coated Foamed Roofing
758	Roll Roofing
761	Sheet Metal Roofing
762	Sheet Metal Flashing And Trim
765	Flexible Flashing
771	Roof Specialties
772	Roof Accessories
781	Applied Fireproofing
784	Firestopping
791	Preformed Joint Seals
792	Joint Sealants
795	Expansion Control
801	Operation and Maintenance Of Openings
805	Common Work Results For Openings
811	Metal Doors And Frames
812	Metal Frames
813	Metal Doors
814	Wood Doors
816	Composition Door
817	Integrated Door Opening Assemblies
831	Access Doors And Panels
832	Sliding Glass Doors
833	Coiling Doors And Grilles
834	Special Function Doors
836	Panel Doors
841	Entrances And Storefronts
842	Entrances



CSI Code	Description
843	Storefronts
844	Curtain Wall And Glazed Assemblies
845	Translucent Wall and Roof Assemblies
851	Metal Windows
852	Wood Windows
853	Plastic Windows
854	Composite Windows
856	Special Function Windows
861	Roof Windows
862	Unit Skylights
863	Metal-Framed Skylights
871	Door Hardware
874	Access Control Hardware
875	Window Hardware
879	Hardware Accessories
881	Glass Glazing
883	Mirrors
884	Plastic Glazing
885	Glazing Accessories
887	Glazing Surface Films
888	Special Function Glazing
891	Louvers
895	Vents
901	Maintenance Of Finishes
905	Common Work Results For Finishes
921	Plaster And Gypsum Board Board
922	Supports For Plaster And Gypsum Board
923	Gypsum Plastering
924	Cement Plastering
926	Veneer Plastering
928	Backing Boards And Underlayments
929	Gypsum Board
930	Tiling
934	Waterproofing-Membrane Tiling
951	Acoustical Ceilings
953	Acoustical Ceiling Suspension Assemblies
954	Specialty Ceilings
958	Integrated Ceiling Assemblies
962	Specialty Flooring
963	Masonry Flooring



966 Resilient Flooring 966 Terrazzo Flooring 967 Fluid-Applied Flooring 968 Carpeting 969 Access Flooring 972 Wall Coverings 977 Special Wall Surfacing 981 Acoustic Insulation 984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1034 Fire Protection Specialties 1055 Postal Specialties 1056 Storage Assembiles 1057 Wardrobe And Closet Specialties 1058 Storage Assembiles 1057 Flagpoles 1074 Manufactured Exterior Specialties 1075 Flagpoles 1076 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Loading Dock Equipment 1111 Loading Dock Equipment 1111 Loading Dock Equipment		
966 Terrazzo Flooring 967 Fluid-Applied Flooring 968 Carpeting 969 Access Flooring 972 Wall Coverings 977 Special Wall Surfacing 981 Acoustic Insulation 984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1033 Fire Protection Specialties 1044 Fire Protection Specialties 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1058 Toilet, Eath, Closet Specialties 1059 Postal Specialties 1050 Storage Assemblies 1051 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment	964	Wood Flooring
967 Fluid-Applied Flooring 968 Carpeting 969 Access Flooring 972 Wall Coverings 977 Special Wall Surfacing 981 Acoustic Insulation 984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1021 Compartments And Cubicles 1022 Partitions 1023 Toilet, Bath, And Laundry Accessories 1034 Manufactured Fireplaces 1035 Stove 1044 Fire Protection Specialties 1035 Stove 1044 Fire Protection Specialties 1035 Stove 1044 Fire Protection Specialties 1056 Storage Assemblies 1057	965	Resilient Flooring
968 Carpeting 969 Access Flooring 972 Wall Coverings 977 Special Wall Surfacing 981 Acoustic Insulation 984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1076 Common Work Results For Equipment 1077 Flagpoles 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment	966	Terrazzo Flooring
969 Access Flooring 972 Wall Coverings 977 Special Wall Surfacing 981 Acoustic Insulation 984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1032 Fireplace Specialties 1034 Fire Protection Specialties 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment 1111 Vehicle Service Equipment	967	Fluid-Applied Flooring
972 Wall Coverings 977 Special Wall Surfacing 981 Acoustic Insulation 984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1070 Flagpoles 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment	968	Carpeting
977 Special Wall Surfacing 981 Acoustic Insulation 984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1023 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1033 Stove 1044 Fire Protection Specialties 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactu	969	Access Flooring
981 Acoustic Insulation 984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1056 Postal Specialties 1057 Wardrobe And Closet Specialties 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment	972	Wall Coverings
984 Acoustic Room Components 991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment	977	Special Wall Surfacing
991 Painting 993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1058 Toilet Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment 1111 Parking Control Equipment 1111 Parking Control Equipment	981	Acoustic Insulation
993 Staining And Transparent Finishing 996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment 1111 Parking Control Equipment 1111 Parking Control Equipment	984	Acoustic Room Components
996 High-Performance Coatings 997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment	991	Painting
997 Special Coatings 1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1111 Parking Control Equipment 1111 Loading Dock Equipment	993	Staining And Transparent Finishing
1015 Common Work Results For Specialties 1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	996	High-Performance Coatings
1011 Visual Display Units 1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	997	Special Coatings
1013 Directories 1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1055 Flagpoles 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1015	Common Work Results For Specialties
1014 Signage 1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment	1011	Visual Display Units
1017 Telephone Specialties 1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1085 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1013	Directories
1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1014	Signage
1021 Compartments And Cubicles 1022 Partitions 1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1017	Telephone Specialties
1026 Wall And Door Protections 1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment	1021	
1028 Toilet, Bath, And Laundry Accessories 1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1022	Partitions
1031 Manufactured Fireplaces 1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1026	Wall And Door Protections
1032 Fireplace Specialties 1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1028	Toilet, Bath, And Laundry Accessories
1035 Stove 1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1031	Manufactured Fireplaces
1044 Fire Protection Specialties 1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1032	Fireplace Specialties
1051 Lockers 1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1035	Stove
1055 Postal Specialties 1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1044	Fire Protection Specialties
1056 Storage Assemblies 1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1051	Lockers
1057 Wardrobe And Closet Specialties 1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1055	Postal Specialties
1071 Exterior Protection 1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1056	Storage Assemblies
1073 Protective Covers 1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1057	Wardrobe And Closet Specialties
1074 Manufactured Exterior Specialties 1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1071	Exterior Protection
1075 Flagpoles 1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1073	Protective Covers
1081 Pest Control Devices 1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1074	Manufactured Exterior Specialties
1088 Scales 1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1075	Flagpoles
1105 Common Work Results For Equipment 1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1081	Pest Control Devices
1111 Vehicle Service Equipment 1112 Parking Control Equipment 1113 Loading Dock Equipment	1088	Scales
1112 Parking Control Equipment 1113 Loading Dock Equipment	1105	Common Work Results For Equipment
1113 Loading Dock Equipment	1111	Vehicle Service Equipment
	1112	Parking Control Equipment
1114 Pedestrian Control Equipment	1113	Loading Dock Equipment
	1114	Pedestrian Control Equipment



1117	Teller And Service Equipment	
1119	Detention Equipment	
1121	Mercantile And Service Equipment	



CSI Code	Description
1123	Commercial Laundry And Dry Cleaning Equipment
1124	Maintenance Equipment
1126	Unit Kitchens
1127	Photographic Processing Equipment
1131	Residential Appliances
1133	Retractable Stairs
1141	Foodservice Storage Equipment
1142	Food Preparation Equipment
1143	Food Delivery Carts And Conveyors
1144	Food Cooking Equipment
1146	Food Dispensing Equipment
1147	Ice Machines
1148	Cleaning And Disposal Equipment
1152	Audio-Visual Equipment
1153	Laboratory Equipment
1157	Vocational Shop Equipment
1161	Theater And Stage Equipment
1162	Musical Equipment
1166	Athletic Equipment
1167	Recreational Equipment
1168	Play Field Equipment and Structures
1171	Medical Sterilizing Equipment
1172	Examination And Treatment Equipment
1173	Patient Care Equipment
1174	Dental Equipment
1176	Operating Room Equipment
1177	Radiology Equipment
1178	Mortuary Equipment
1182	Solid Waste Handling Equipment
1191	Religious Equipment
1205	Common Work Results For Furnishings
1212	Wall Decorations
1221	Window Blinds
1222	Curtains And Drapes
1223	Interior Shutters
1224	Window Shades
1232	Manufactured Wood Casework
1234	Manufactured Plastic Casework
1235	Specialty Casework
1236	Countertops



1243	Portable Lamps
1245	Bedroom Furnishings
1246	Furnishing Accessories
1248	Rugs And Mats
1251	Office Furniture
1252	Seating
1254	Hospitality Furniture
1255	Detention Furniture
1256	Institutional Furniture
1259	Systems Furniture
1261	Fixed Audience Seating
1263	Stadium And Arena Seating
1267	Pews And Benches
1292	Interior Planters And Artificial Plants
1293	Site Furnishings
1305	Common Work Results For Special Construction
1311	Swimming Pools
1312	Fountains
1317	Tubs And Pools
1318	Ice Rinks
1321	Controlled Environment Rooms
1324	Special Activity Rooms
1328	Athletic And Recreational Special Construction
1331	Fabric Structures
1334	Fabricated Engineered Structures
1336	Towers
1342	Building Modules
1348	Sound, Vibration, And Seismic Control
1349	Radiation Protection
1353	Meteorological Instrumentation
1405	Common Work Results For Conveying Equipment
1411	Manual Dumbwaiters
1412	Electric Dumbwaiters
1421	Electric Traction Elevators
1424	Hydraulic Elevators
1427	Custom Elevator Cabs And Doors
1428	Elevator Equipment And Controls
1431	Escalators
1432	Moving Walks
1442	Wheelchairs Lifts
1445	Vehicle Lifts
1451	Correspondence And Parcel Lifts



1491	Facility Chutes
1492	Pneumatic Tube Systems
2105	Common Work Results For Fire Suppression
2111	Facility Fire-Suppression Water-Service Piping
2112	Fire-Suppression Standpipes
2113	Fire-Suppression Sprinkler Systems
2121	Carbon-Dioxide Fire-Extinguishing Systems
2122	Clean-Agent Fire-Extinguishing Systems
2131	Centrifugal Fire Pumps
2201	Operation And Maintenance Of Plumbing
2205	Common Work Results For Plumbing
2207	Plumbing Insulation



CSI Code	Description
2211	Facility Water Distribution
2212	Facility Potable-Water Storage Tanks
2213	Facility Sanitary Sewerage
2214	Facility Storm Drainage
2215	General Service Compressed-Air Systems
2231	Domestic Water Softeners
2232	Domestic Water Filtration Equipment
2233	Electric Domestic Water Heaters
2234	Fuel-Fired Domestic Water Heaters
2235	Domestic Water Heat Exchangers
2241	Residential Plumbing Fixtures
2242	Commercial Plumbing Fixtures
2243	Healthcare Plumbing Fixtures
2245	Emergency Plumbing Fixtures
2246	Security Plumbing Fixtures
2247	Drinking Fountains And Water Coolers
2251	Swimming Pool Plumbing Systems
2252	Fountain Plumbing Systems
2262	Vacuum Systems For Laboratory And Healthcare Facilities
2263	Gas Systems For Laboratory And Healthcare Facilities
2266	Chemical-Waste Systems For Lab. And Healthcare Facilities
2305	Common Work Results For HVAC
2307	HVAC Insulation
2309	Instrumentation And Control For HVAC
2311	Facility Fuel Piping
2312	Facility Fuel Pumps
2313	Facility Fuel-Storage Tanks
2321	Hydronic Piping And Pumps
2322	Steam And Condensate Piping And Pumps
2323	Refrigerant Piping
2331	HVAC Ducts And Casings
2333	Air Duct Accessories
2334	HVAC Fans
2335	Special Exhaust Systems
2336	Air Terminal Units
2337	Air Outlets And Inlets
2338	Ventilation Hoods
2341	Particulate Air Filtration
2342	Gas-Phase Air Filtration
2343	Electronic Air Cleaners



2351	Breechings, Chimneys, And Stacks
2352	Heating Boilers
2353	Heating Boiler Feedwater Equipment
2354	Furnaces
2355	Fuel-Fired Heaters
2356	Solar Energy Heating Equipment
2357	Heat Exchangers For HVAC
2361	Refrigerant Compressors
2362	Packaged Compressor And Condenser Units
2363	Refrigerant Condensers
2364	Packaged Water Chillers
2365	Cooling Towers
2372	Air-To-Air Energy Recovery Equipment
2373	Indoor Central-Station Air-Handling Units
2374	Packaged Outdoor HVAC Equipment
2376	Evaporative Air-Cooling Equipment
2381	Decentralized Unitary HVAC Equipment
2382	Convection Heating And Cooling Units
2383	Radiant Heating Units
2384	Humidity ControlEquipment
2391	Prefabricated Equipment Supports



CSI Code	Description
2601	Operation And Maintenance Of Electrical Systems
2605	Common Work Results For Electrical
2609	Instrumentation And Control For Electrical Systems
2612	Medium-Voltage Transformers
2613	Medium-Voltage Switchgear
2622	Low-Voltage Transformers
2624	Switchboards And Panelboards
2627	Low-Voltage Distribution Equipment
2628	Low-Voltage Circuit Protective Devices
2629	Low-Voltage Controllers
2631	Photovoltaic Collectors
2632	Packaged Generator Assemblies
2633	Battery Equipment
2635	Power Filters And Conditioners
2636	Transfer Switches
2641	Facility Lightning Protection
2642	Cathodic Protection
2651	Interior Lighting
2652	Emergency Lighting
2653	Exit Signs
2654	Classified Location Lighting
2655	Special Purpose Lighting
2655	Exterior Lighting
2661	Lighting Systems And Accessories
2671	Electrical Machines
2701	Operation And Maintenance Of Communications Systems
2705	Common Work Results For Communications
2711	Communications Equipment Room Fittings
2713	Communications Backbone Cabling
2715	Communications Horizontal Cabling
2721	Data Communications Terminal Equipment
2732	Voice Communications Terminal Equipment
2741	Audio-Video Systems
2751	Distributed Audio-Video Communications Systems
2752	Healthcare Communications And Monitoring Systems
2753	Distributed Systems
2801	Operation And Maintenance Of Electronic Safety and Security
2805	Common Work Results For Electronic Safety and Security
2813	Access Control
2816	Intrusion Detection



2823	Video Surveillance
2831	Fire Detection And Alarm
2832	Radiation Detection And Alarm
2833	Gas Detection And Alarm
2839	Mass Notification Systems
3105	Common Work Results For Earthwork
3106	Schedules For Earthwork
3111	Clearing And Grubbing
3113	Selective Tree And Shrub Removal And Trimming
3114	Earth Stripping And Stockpiling
3122	Grading
3123	Excavation And Fill
3125	Erosion And Sedimentation Controls
3131	Soil Treatment
3132	Soil Stabilization
3133	Rock Stabilization
3136	Gabion
3137	Riprap
3141	Shoring
3143	Concrete Raising
3145	Vibroflotation And Densification
3148	Underpinning
3152	Cofferdams
3156	Slurry Walls
3162	Driven Piles
3163	Bored Piles
3171	Tunnel Excavation
3173	Tunnel Grouting
3174	Tunnel Construction
3201	Operation And Maintenance Of Exterior Improvements
3206	Schedules For Exterior Improvement
3211	Base Courses
3212	Flexible Paving
3213	Rigid Paving
3214	Unit Paving
3216	Curb, Gutters, Sidewalks, And Driveways
3217	Paving Specialties
3218	Athletic And Recreational Surfacing
3231	Fences And Gates
3232	Retaining Walls
3234	Fabricated Bridges
3235	Screening Devices



3284	Planting Irrigation
3291	Planting Preparation
3292	Turn And Grasses
3301	Operation And Maintenance Of Utilities
3305	Common Work Results For Utilities
3311	Water Utility Distribution Piping
3312	Water Utility Distribution Equipment
3316	Water Utility Storage Tanks
3321	Water Supply Wells
3331	Sanitary Utility Sewerage Piping
3332	Wastewater Utility Pumping Stations
3336	Utility Septic Tanks
3341	Storm Utility Drainage Piping
3342	Culverts
3344	Storm Utility Water Drains
3346	Subdrainage
3347	Ponds And Reservoirs
3349	Storm Drainage Structures
3351	Natural Gas Distribution
3352	Liquid Fuil Distribution
3361	Hydronic Energy Distribution
3363	Steam Energy Distribution
3371	Electrical Utility Transmission And Distribution
3372	Utility Substations
3373	Utility Transformers
3375	High Voltage Switchgear And Protection Devices
3379	Site Grounding
3381	Communications Structures
3401	Operation And Maintenance Of Transportation
3411	Rail Tracks
3443	Roadway Signaling And Control Equipment
3471	Roadway Construction
3472	Railway Construction
3477	Transportation Equipment
3500	Waterway And Marine Construction
3501	Operation And Maintenance Of Waterway And Marine Construction
3505	Common Work Results for Waterway And Marine Construction
3506	Schedules For Waterway And Marine Construction
3508	Commissioning Of Waterway And Marine Construction
3510	Waterway And Marine Signaling And Control Equipment
3511	Signaling And Control Equipment For Waterways



0540	M : 0: E A 10 + 15 : +5 B
3512	Marine Signaling And Control Equipment For Dams
3513	Signaling And Control Equipment For Dams
3520	Waterway And Marine Construction And Equipment
3530	Coastal Construction
3531	Shoreline Protection
3540	Waterway Construction And Equipment
3541	Levees
3542	Waterway Bank Protection
3543	Waterway Scour Protection
3549	Waterway Structures
3550	Marine Construction And Equipment
3551	Floating Construction
3552	Offshore Platform Costruction
3553	Underwater Construction
3559	Marine Specialties
3570	Dam Construction And Equipment
3571	Gravity Dams
3572	Arch Dams
3573	Embarkment Dams
3574	Buttress Dams
3579	Auxiliary Dam Structures
3599	Waterway And Marine Construction - Other
4000	Process Integration
4001	Operation And Maintenance Of Process Integration
4005	Common Work Results For Process Integration
4006	Schedules For Process Integration
4010	Gas And Vapor Process Piping
4011	Steam Process Piping
4012	Compressed Air Process Piping
4013	Inert Gases Process Piping
4014	Fuel Gases Process Piping
4015	Combustion System Gas Piping
4016	Specialty And High-Purity Gases Piping
4017	Welding And Cutting Gases Piping
4018	Vacuum Systems Process Piping
4020	Liquids Process Piping
4021	Liquid Fuel Process Piping
4022	Petroleum Products Piping
4023	Water Process Piping
4024	Specialty Liquid Chemicals Piping
4025	Liquid Acids And Bases Piping
4026	Liquid Polymer Piping



4030	Solid And Mixed Materials Piping And Chutes
4032	Bulk Materials Piping And Chutes
4033	Bulk Materials Valves
4034	Pneumatic Conveying Lines
4040	Process Piping And Equipment Protection
4041	Process Piping And Equipment Heat Tracing
4042	Process Piping And Equipment Insulation
4046	Process Corrosion Protection
4047	Refractories
4080	Commissioning Of Process Systems
4090	Instrumentation And Control For Process Systems
4091	Primary Process Measurement Devices
4092	Primary Control Devices
4093	Analog Controllers/Recorders
4094	Digital Process Controllers
4095	Process Control Hardware
4096	Process Control Software
4097	Process Control Auxiliary Devices
4099	Process Integration - Other
4100	Material Processing And Handling Equipment
4101	Operation And Maintenance Of Material Processing And Handling Equipment
4106	Schedules For Material Processing And Handling Equipment
4108	Commissioning Of Material Processing And Handling Equipment
4110	Bulk Material Processing Equipment
4111	Bulk Material Sizing Equipment
4112	Bulk Material Conveying Equipment
4113	Bulk Material Feeders
4114	Batching Equipment
4120	Piece Material Handling Equipment
4121	Conveyors
4122	Cranes And Hoists
4123	Lifting Devices
4124	Specialty Material Handling Equipment
4130	Manufacturing Equipment
4131	Manufacturing Lines And Equipment
4132	Forming Equipment
4133	Machining Equipment
4134	Finishing Equipment
4135	Dies And Molds
4136	Assembly And Testing Equipment
4140	Conainer Processing And Packaging



T	
4141	Container Filling And Sealing
4142	Container Packing Equipment
4143	Shipping Package
4150	Material Storage
4151	Automatic Material Storage
4152	Bulk Material Storage
4153	Storage Equipment And Systems
4160	Mobile Plant Equipment
4161	Mobile Earth Moving Equipment
4162	Trucks
4163	General Vehicles
4164	Rail Vehicles
4165	Mobile Support Equipment
4166	Miscellaneous Mobile Equipment
4167	Plant Maintenance Equipment
4199	Material Processing And Handling Equipment – Other
4200	Process Heating, Cooling, And Drying Equipment
4201	Operation And Maintenance Of Process Heating, Cooling, And Drying Equipment
4206	Schedules For Process Heating, Cooling, And Drying Equipment
4208	Commisioning Of Process Heating, Cooling, And Drying Equipment
4210	Process Heating Equipment
4211	Process Boilers
4212	Process Heaters
4213	Industrial Heat Exchangers And Recuperators
4214	Industrial Furnaces
4215	Industrial Ovens
4220	Process Cooling Equipment
4221	Process Cooling Towers
4222	Process Chillers And Coolers
4223	Process Condensers And Evaporators
4230	Process Drying Equipment
4231	Gas Dryers And Dehumidifiers
4232	Material Dryers
4299	Process Heating, Cooling, And Drying Equipment – Other
4300	Process Gas And Liquid Handling, Purification, And Storage Equipment
4301	Operation And Maintenance Of Process Gas And Liquid Handling, Purification, And Storage Equipment
4306	Schedules For Process Gas And Liquid Handling, Purification, And Storage Equipment
4308	Commissioning Of Process Gas And Liquid Handling, Purification, And Storage Equipment
4310	Gas Handling Equipment



-	
4311	Gas Fans Blowers, And Pumps
4312	Gas Compressors
4313	Gas Process Equipment
4320	Liquid Handling Equipment
4321	Liquid Pumps
4322	Liquid Process Equipment
4330	Gas And Liquid Purification Equipment
4331	Gas And Liquid Purification Filtration Equipment
4332	Gas And Liquid Purification Process Equipment
4340	Gas And Liquid Storage
4341	Gas And Liquid Storage Equipment
4399	Process Gas And Liquid Handling, Purification, And Storage Equipment
4400	Pollution And Waste Control Equipment
4401	Operation And Maintenance Of Pollution And Waste Control Equipment
4405	Common Work Results For Pollution And Waste Control Equipment
4406	Schedules For Pollution And Waste Control Equipment
4408	Commissioning Of Pollution And Waste Control Equipment
4410	Air Pollution Control
4411	Particulate Control Equipment
4413	Gaseous Air Pollution Control Equipment
4420	Noise Pollution Control
4421	Noise Pollution Control Equipment
4430	Odor Control
4432	Odor Dispersing And Masking/Counteracting Equipment
4440	Water Pollution Control Equipment
4441	Water Pollution Containment And Cleanup Equipment
4450	Solid Waste Control And Reuse
4451	Solid Waste Collection, Transfer, And Hauling Wquipment
4455	Composting Equipmen
4460	Waste Thermal Processing Equipment
4461	Waste-to-Energy Plants
4462	Fluidize Bed Combustion Equipment
4463	Rotary Kin Incinerators
4464	Pyrolysis Equipment
4465	Hazardous Waste And Medical Waste Incinerators
4466	Hazardous Waste And Medical Waste Incinerators
4467	Heat Recovery Equipment For Waste Thermal Processing
4468	Synthesis Gas Cleanup And Handling Equipment
4499	Pollution And Waste Control Equipment - Other
4500	Industry – Specific Manufacturing Equipment
4508	Commissioning Of Industry-Specific Manufacturing Equipment
	<u> </u>



4511	Oil And Gas Extraction Equipment
4513	Mining Machinery And Equipment
4515	Food Manufacturing Equipment
4517	Beverage And Tobacco Manufacturing Equipment
4519	Textiles And Apparel Manufacturing Equipment
4521	Leather And Allied Product Manufacturing Equipment
4523	Wood Product Manufacturing Equipment
4525	Paper Manufacturing Equipment
4527	Printing And Related Manufacturing Equipment
4529	Petroleum And Coal Products Manufacturing Equipment
4531	Chemical Manufacturing Equipment
4533	Plastics And Rubber Manufacturing Equipment
4535	Nonmetallic Mineral Product Manufacturing Equipment
4537	Primary Metal Manufacturing Equipment
4539	Fabricated Metal Product Manufacturing Equipment
4541	Machinery Manufacturing Equipment
4543	Computer And Electronic Product Manufacturing Equipment
4545	Electrical Equipment, Appliance, And Component Manufacturing Equipment
4547	Transportation Manufacturing Equipment
4549	Furniture And Related Product Manufacturing Equipment
4551	Other Manufacturing Equipment
4599	Industry-Specific Manufacturing Equipment - Other
4601	Operation And Maintenance Of Water And Wastewater Equipment
4605	Common Work Results for Water And Wastewater Equipment
4606	Schedules for Water And Wastewater Equipment
4607	Packaged Water And Wastewater Equipment
4608	Commissioning of Water And Wastewater Equipment
4620	Water And Wastewater Preliminary Treatment Equipment
4621	Screening Equipment
4623	Grit Removal And Handling Equipment
4624	Grinding And Shredding Equipment
4625	Oil And Grease Separation And Removal Equipment
4630	Water And Wasterwater Clarification And Mixing Equipment
4633	Liquid Chemical Feed Equipment
4636	Dry Chemical Feed Equipment
4640	Water And Wastewater Clarification And Mixing Equipment
4641	Mixing Equipment
4643	Clarifier Equipment
4646	Sediment Removal Equipment
4650	Water And Wastewater Secondary Treatment Equipment
4651	Air And Gas Diffusion Equipment



4653	Biological Treatment Systems
4660	Water And Wastewater Advanced Treatment Equipment
4661	Filtration Equipment
4663	Demineralization Equipment
4666	Ultraviolet Equipment
4670	Water And Wastewater Residuals Handling and Treatment
4671	Residuals Thickening Equipment
4673	Residuals Stabilization
4676	Residuals Dewatering Equipment
4678	Thermal Treatment Of Residuals
4699	Water And Wastewater Equipment – Other
4800	Electric Power Generation
4801	Operation And Maintenance For Electrical Power Generation
4805	Common Work Results For Electrical Power Generation
4808	Commissioning Of Electrical Power Generation
4809	Instrumentation And Control Of Electrical Power Generation
4810	Electrical Power Generation Equipment
4811	Fossil Fuel Plant Electrical Power Generation Equipment
4812	Nuclear Fuel Plant Electrical Power Generation Equipment
4813	Hydroelectric Plant Electrical Power Generation Equipment
4814	Solar Energy Electrical Power Generation Equipment
4815	Wind Energy Electrical Power Generation Equipment
4816	Geothermal Energy Electrical Power Generation Equipment
4817	Electrochemical Energy Electrical Power Generation Equipment
4818	Fuel Cell Electrical Power Generation Equipment
4819	Electrical Power Control Equipment
4870	Electrical Power Generation Testing
4871	Electrical Power Generation Test Equipment
4899	Electrical Power Generation - Other



Appendix B – CRM Integration XML format version 1.3 example files

Introduction

This section contains an example of the CRM Integration XML format 1.3 file populated with sample customer data.

```
<?xml version="1.0" encoding="utf-8"?>
<Project ProjectID="9209399" DataSourceID="CAN" Title="Rehabilitation Centre Alts: Centre montérégien de réadaptation" Stage="Biddate Set" URL="http://insight.
cmdgroup.com/SingleSignOn/ProjectDetails/9209399/2/" UpdateDate="2014-08-28">
     <Valuation Value="150000.00" Currency="CAD" ValueType="Staff estimate" />
     <Parameters>
          <Parameter Ownership="City" WorkType="Alteration" CommenceDate="2014-09-05" MandatoryPreBidConferenceDate="2014-09-03" ContractType="Trade ContractTrade</p>
Contract" />
     </Parameters>
     <DocumentAvailability Plans="false" Specs="false" Addenda="false" />
     <ParentCategories>
          <ParentCategory Name="COMMERCIAL">
               <SubCategories>
                    <SubCategory>Laboratories</SubCategory>
               </SubCategories>
          </ParentCategory>
          <ParentCategory Name="MEDICAL">
               <SubCategories>
                    <SubCategory>Hospitals, Clinics</SubCategory>
                    <SubCategory>Medical Offices</SubCategory>
                    <SubCategory>Nursing Homes</SubCategory>
               </SubCategories>
          </ParentCategory>
     </ParentCategories>
     <StageComments>
          <StageComment>Tenders Due</StageComment>
     </StageComments>
     <Addresses>
          <Address ProjectAddressType="Project">
               <AddressLine1>5300 ch de Chambly</AddressLine1>
               <AddressLine2/>
               <City>St-Hubert</City>
               <StateProvince>QC</StateProvince>
               <ZipPostalCode>J3Y 3N7</ZipPostalCode>
               <County>Rivière-du-Loup, comté</County>
               <CountryRegion>Canada</CountryRegion>
          </Address>
     </Addresses>
     <Contracts>
          <Contract BidDate="2014-09-23" BidsTo="Owner" BidTime="14:00" BidDateAsap="false" BidDateHold="false" Classification="Roofing" Invitation="CMR-C06-0822"</p>
BidType="Open Bidding" />
```

```
</Contracts>
     <Companies>
          <Company Role="Owner" Name="Ctre Montérégien Réadaptation" URL="http://insight.cmdgroup.com/SingleSignOn/CompanyDetails/399270/2" LastUpdate="2014-08-28"
CompanyID="399270" DataSourceID="CAN">
                <Contacts>
                     <Contact Name="Joanne Léonard" ContactID="A82EBEFC-2DFA-11E4-9A8B-5FCE069E6E5C" />
                </Contacts>
                <Addresses>
                     <Address AddressType="Street Address">
                          <AddressLine1>5300 ch de Chambly</AddressLine1>
                          <AddressLine2 />
                          <City>St-Hubert</City>
                          <StateProvince>QC</StateProvince>
                          <ZipPostalCode>J3Y 3N7</ZipPostalCode>
                          <County>Champlain, comté</County>
                          <CountryRegion>Canada</CountryRegion>
                     </Address>
                </Addresses>
                <Phones>
                     <Phone PhoneType="Company Phone Number">450 676-7447</Phone>
                     <Phone PhoneType="Fax Phone Number">450 676-0047</Phone>
                </Phones>
                <ParticipantRoles>
                     <ParticipantRole RoleClassification="Owner" ContactName="Joanne Léonard" />
                </ParticipantRoles>
          </Company>
     </Companies>
     <Users>
          <Queries>
                     <Query QueryId="639033" QueryName="alcotex"/>
                </Queries>
          </User>
     </Users>
     <Details>
          <Detail DetailType="Scope"><![CDATA[Medical bldgs; roof and awnings repair (Wing C). ]]></Detail>
          Detail DetailType="Contract Conditions"><![CDATA[Documents available through tel: 1-866-669-7326 or at 514 856-6600. TENDER DEPOSIT: 10% bid bond or 5% cert</p>
cheque. MANDATORY SITE VISIT: September 3 at 13:30 Contractors can bid only if their principal place of business is in Québec or, when an intergovernmental agreement is applicable,
in Québec or in a province or territory under that agreement, and if they possess a license required under the bldg law (RSQ c B-1.1).]]></Detail>
     </Details>
     <Notes />
     <ListDate>2014-08-27</ListDate>
<Project ProjectID="9209403" DataSourceID="CAN" Title="Townhouses, Condominium, Apartment Building: Discovery Ridge" Stage="Pre-Design" URL="http://insight.
cmdgroup.com/SingleSignOn/ProjectDetails/9209403/2/" UpdateDate="2014-08-28">
     <Valuation Value="7800000.00" Currency="CAD" ValueType="Staff estimate" />
```

```
<Parameters>
                         <Parameter Ownership="Private" WorkType="New" FloorArea="60000" Structures="5" Units="51" ContractType="General contractGeneral contractGen
FloorAreaUnitofMeasure="square feet" />
            </Parameters>
             <DocumentAvailability Plans="false" Specs="false" Addenda="false" />
             <ParentCategories>
                         <ParentCategory Name="EDUCATIONAL">
                                      <SubCategories>
                                                   <SubCategory>Dormitories</SubCategory>
                                      </SubCategories>
                          </ParentCategory>
                          <ParentCategory Name="MEDICAL">
                                      <SubCategories>
                                                   <SubCategory>Nursing Homes</SubCategory>
                                      </SubCategories>
                          </ParentCategory>
                          <ParentCategory Name="MILITARY">
                                      <SubCategories>
                                                   <SubCategory>Military Housing</SubCategory>
                                      </SubCategories>
                          </ParentCategory>
                          <ParentCategory Name="RESIDENTIAL">
                                      <SubCategories>
                                                   <SubCategory>Apartments</SubCategory>
                                                   <SubCategory>Condominiums</SubCategory>
                                                   <SubCategory>Townhomes</SubCategory>
                                      </SubCategories>
                         </ParentCategory>
             </ParentCategories>
             <StageComments>
                         <StageComment>Contemplated</StageComment>
             </StageComments>
             <Addresses>
                         <Address ProjectAddressType="Project">
                                      <a href="https://www.edu.netricolor.com/">AddressLine1> Wheeler's Road and Corporal Pinksen Drive</a>/AddressLine1>
                                      <AddressLine2/>
                                      <City>Corner Brook</City>
                                      <StateProvince>NL</StateProvince>
                                      <ZipPostalCode>A2H</ZipPostalCode>
                                      <County>Division No 5</County>
                                      <CountryRegion>Canada</CountryRegion>
                         </Address>
             </Addresses>
             <Companies>
                          .

-<a href="Company Role="Owner" Name="Sleepy Cove Developments" URL="http://insight.cmdgroup.com/SingleSignOn/CompanyDetails/867226/2" LastUpdate="2014-08-28"</a>
CompanyID="867226" DataSourceID="CAN">
```

```
<Contacts>
                     <Contact Name="Trina Burden" ContactID="686A1A5C-24A7-11E4-A9FC-57A2069E6E5C" />
                </Contacts>
                <Addresses>
                     <Address AddressType="Street Address">
                          <AddressLine1>8 Gullage Ave</AddressLine1>
                          <AddressLine2 />
                          <Citv>Corner Brook</Citv>
                          <StateProvince>NL</StateProvince>
                          <ZipPostalCode>A2H 6H6</ZipPostalCode>
                          <County>Division No 5</County>
                          <CountryRegion>Canada</CountryRegion>
                     </Address>
                </Addresses>
                <Phones>
                     <Phone PhoneType="Company Phone Number">709 634-9705</Phone>
                </Phones>
                <ParticipantRoles>
                     <ParticipantRole RoleClassification="Owner" ContactName="Trina Burden" />
                </ParticipantRoles>
          </Company>
     </Companies>
     <Users>
           <Queries>
                     <Query QueryId="639033" QueryName="alcotex"/>
                </Queries>
          </User>
     </Users>
     <Details>
          <Detail DetailType="Scope"><![CDATA[Apartment bldgs; new residential development to include eleven townhouse units in blocks of 3; a 40-unit condominium; and an</p>
apartment building (scope yet to be defined). ]]></Detail>
          <Detail DetailType="Status"><![CDATA[Project is preliminary. Early planning is underway in-house. Construction of the townhouse units may proceed mid-2015, pending</p>
sales. Scope of work and schedules for the condominium development and apartment building are yet to be finalized. Further update spring 2015.]]></Detail>
          <Detail DetailType="Notes"><![CDATA[http://discoveryridgenl.ca/]]></Detail>
     </Details>
     <RSMeansMaterialDivisions>
           <Division Description="Concrete" Code="3" MaterialCostValue="165360.00" InstallationCostValue="237900.00" TotalCostValue="403260.00">
                <Material Code="311">Concrete Forming</Material>
                <Material Code="315">Concrete Accessories</material>
                <Material Code="321">Reinforcement Bars</material>
                <Material Code="322">Fabric And Grid Reinforcing
                <Material Code="331">Structural Concrete</material>
                <Material Code="335">Concrete Finishing</Material>
                <Material Code="339">Concrete Curing</Material>
           </Division>
```

```
<Division Description="Masonry" Code="4" MaterialCostValue="140400.00" InstallationCostValue="365040.00" TotalCostValue="505440.00">
         <Material Code="401">Maintenance Of Masonry</Material>
         <Material Code="405">Common Work Results For Masonry
         <Material Code="427">Multiple-Wythe Unit Masonry
</Division>
<Division Description="Metals" Code="5" MaterialCostValue="737880.00" InstallationCostValue="294840.00" TotalCostValue="1032720.00">
         <Material Code="505">Common Work Results For Metals
         <Material Code="512">Structural Steel Framing
         <Material Code="521">Steel Joist Framing</Material>
         <Material Code="531">Steel Decking</Material>
         <Material Code="551">Metal Stairs</Material>
</Division>
<Division Description="Wood, Plastics, and Composites" Code="6" MaterialCostValue="109200.00" InstallationCostValue="66300.00" TotalCostValue="175500.00">
         <Material Code="611">Wood Framing</Material>
         <Material Code="616">Sheathing</Material>
         <Material Code="648">Wood Frames</Material>
</Division>
<Division Description="Thermal and Moisture Protection" Code="7" MaterialCostValue="84240.00" InstallationCostValue="93600.00" TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00">TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</TotalCostValue="177840.00</To
         <Material Code="721">Thermal Insulation</Material>
         <Material Code="722">Roof And Deck Insulation/Material>
         <Material Code="726">Vapor Retarders</material>
         <Material Code="751">Built-Up Bituminous Roofing
         <Material Code="753">Elastomeric Membrane Roofing
         <Material Code="765">Flexible Flashing</Material>
         <Material Code="771">Roof Specialties</Material>
         <Material Code="791">Preformed Joint Seals
         <Material Code="792">Joint Sealants</Material>
</Division>
<Division Description="Openings" Code="8" MaterialCostValue="288600.00" InstallationCostValue="138840.00" TotalCostValue="427440.00">
         <Material Code="812">Metal Frames</Material>
         <Material Code="813">Metal Doors</Material>
         <Material Code="814">Wood Doors/Material>
         <Material Code="851">Metal Windows</Material>
         <Material Code="871">Door Hardware/Material>
</Division>
<Division Description="Finishes" Code="9" MaterialCostValue="453180.00" InstallationCostValue="767520.00" TotalCostValue="1220700.00">
         <Material Code="922">Supports For Plaster And Gypsum Board
         <Material Code="929">Gypsum Board</Material>
         <Material Code="930">Tiling</Material>
         <Material Code="965">Resilient Flooring</Material>
         <Material Code="968">Carpeting</Material>
         <Material Code="972">Wall Coverings</Material>
         <Material Code="991">Painting</Material>
</Division>
<Division Description="Furnishings" Code="12" MaterialCostValue="165360.00" InstallationCostValue="19500.00" TotalCostValue="184860.00">
         <Material Code="1232">Manufactured Wood Casework
```

```
</Division>
           <Division Description="Conveying Equipment" Code="14" MaterialCostValue="212160.00" InstallationCostValue="84240.00" TotalCostValue="296400.00">
                <Material Code="1424">Hydraulic Elevators</Material>
                <Material Code="1428">Elevator Equipment And Controls
           </Division>
           <Division Description="Fire Suppression" Code="21" MaterialCostValue="26520.00" InstallationCostValue="17940.00" TotalCostValue="44460.00">
                <Material Code="2105">Common Work Results For Fire Suppression
                <Material Code="2111">Facility Fire-Suppression Water-Service Piping
                <Material Code="2113">Fire-Suppression Sprinkler Systems
           </Division>
           <Division Description="Plumbing" Code="22" MaterialCostValue="978900.00" InstallationCostValue="1035840.00" TotalCostValue="2014740.00">
                <Material Code="2205">Common Work Results For Plumbing
                <Material Code="2207">Plumbing Insulation</Material>
                <Material Code="2211">Facility Water Distribution</Material>
                <Material Code="2213">Facility Sanitary Sewerage
                <Material Code="2214">Facility Storm Drainage
                <Material Code="2234">Fuel-Fired Domestic Water Heaters
                <Material Code="2241">Residential Plumbing Fixtures
                <Material Code="2242">Commercial Plumbing Fixtures
           </Division>
           <Division Description="Heating, Ventilating, and Air Conditioning (HVAC)" Code="23" MaterialCostValue="309660.00" InstallationCostValue="177840.00"</p>
TotalCostValue="487500.00">
                <Material Code="2305">Common Work Results For HVAC</Material>
                <Material Code="2313">Facility Fuel-Storage Tanks
                <Material Code="2321">Hydronic Piping And Pumps
                <Material Code="2352">Heating Boilers</Material>
                <Material Code="2364">Packaged Water Chillers
                <Material Code="2382">Convection Heating And Cooling Units
           </Division>
           <Division Description="Electrical" Code="26" MaterialCostValue="257400.00" InstallationCostValue="411840.00" TotalCostValue="669240.00">
                <Material Code="2605">Common Work Results For Electrical
                <Material Code="2624">Switchboards And Panelboards
                <Material Code="2627">Low-Voltage Distribution Equipment
                <Material Code="2628">Low-Voltage Circuit Protective Devices
                <Material Code="2632">Packaged Generator Assemblies</material>
                <Material Code="2651">Interior Lighting</Material>
           </Division>
           <Division Description="Communications" Code="27" MaterialCostValue="6240.00" InstallationCostValue="13260.00" TotalCostValue="19500.00">
                <Material Code="2711">Communications Equipment Room Fittings</material>
                <Material Code="2715">Communications Horizontal Cabling
           </Division>
           <Division Description="Electronic Safety and Security" Code="28" MaterialCostValue="32760.00" InstallationCostValue="11700.00" TotalCostValue="44460.00">
                <Material Code="2831">Fire Detection And Alarm/Material>
           </Division>
           <Division Description="Earthwork" Code="31" MaterialCostValue="9360.00" InstallationCostValue="30420.00" TotalCostValue="39780.00">
                <Material Code="3122">Grading</Material>
```





Appendix C – CRM Integration XML format version 1.3 export schema

Introduction

This section contains a link to the CRM Integration XML format version 1.3 export schema.

CRM Integration XML format version 1.3 export schema

Click on the link below to open the CRM Integration XML format version 1.3 export schema in your system's default browser:

http://insight.cmdgroup.com/schemas/schDataLinkConfV1.3.xsd