

APPROVED MATERIALS LIST

STANDARD SPECIFICATIONS

2011 EDITION

CENTRAL CONTRA COSTA SANITARY DISTRICT

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Bedding and Backfill Materials

Material Type(s): Bedding Type, Backfill

Description:

TYPE	MATERIAL DESCRIPTION
CLSM	<ul style="list-style-type: none"> • Controlled Low Strength Material
Coarse	<ul style="list-style-type: none"> • Drain or Foundation Rock • Crushed stone or gravel (Not mined alluvial material) • Minimum of 95% crushed particles • Durability Index of 40
Type 1	<ul style="list-style-type: none"> • Class 2 Aggregate Base • Newly quarried or recycled material (Not mined alluvial material) • Three-quarter (3/4) inch maximum grading
Type 3	<ul style="list-style-type: none"> • Native material from trench excavation • Free of vegetable matter, debris and refuse, concrete, stones or clods larger than four (4) inches
Type 3 Select	<ul style="list-style-type: none"> • Native Material from trench excavation • Particles must not exceed three-quarter (3/4) inch in diameter • Free of vegetable matter, debris and refuse, concrete, stones or clods larger than four (4) inches

Geotextile Fabric

Material Type(s): Geotextile fabric

Description: Geotextile fabric for paving and wrapping foundation rock.

	Manufacturer	Product
FABRIC FOR WRAPPING FOUNDATION ROCK	Mirafi	600X
	US Fabrics	US 315
	Webtec	HD
	Carthdage Mills	FX-66
	Amoco	2006
	Propex	300 ST
	SKAP	W315
	Thrace/Linq	GTF 300
FABRIC FOR PAVING	Mirafi	Mirapave 400
	US Fabrics	US 90P
	Webtec	OL
	Carthdage Mills	FX-38 OL
	Amoco	4599 Petromat
	Propex	381
	SKAP	GC 130
	Thrace/Linq	130 EX

Cast Iron Fittings



Combination Wye and (1/8) Bend



1/8 Bend



Long Sweep Quarter Bend



P Trap



Reducer



Reducing Combination



San Tee



1/16 Bend



Two Way Combination (Clean Out Only)



Wye



Twin Cleanout

Note: Other fittings may be accepted under special use approval. Contact the District Inspector for such circumstances. All fittings to be four inch (4") or larger.

Cast Metal Products

Material Type(s): Manhole frames, Covers, Rodding Inlets, Adjustment Rings

Manufacturer: Cast Metal Products such as Manhole Frames, Covers, Rodding Inlets and Adjustment Rings can be obtained from but are not limited to the following approved manufacturers:

1. D&L Foundry and Supply
Phone Number: (707) 557-4525
2. South Bay Foundry
Phone Number: (209) 367-1940

Couplings

Material Type(s): Banded Rubber Couplings

Description: For repairs, alterations and house sewers with connections of dissimilar materials. Banded rubber couplings shall have four (4) clamps and metal shear bands.

Manufacturer: Manufacturers included but are not limited to:

1. Fernco®
2. Mission®
3. Husky®

Note: Check with Inspector prior to purchase of material to insure proper coupling is selected for the different pipe types encountered.



Mission® Band Seal



Joints® Calder Coupling



Fernco® Proflex Coupling



**Husky® 4 Clamp Coupling
(80 in-lb)**



**Fernco® Stainless Steel Shear Rings
(60 in-lb)**



**Fernco® Strong Back RC Couplings
(60 in-lb)**



**Fernco® 5000 Series RC Couplings
(60 in-lb)**



**Fernco® No-Hub Couplings
Silver (60 in-lb)
Yellow & Green (80 in-lb)**

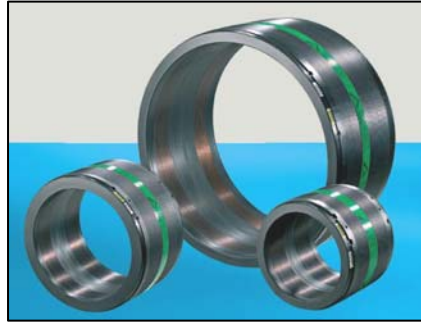


Mission® Adjustable Repair Coupling



**Anaco No Hub
(60 in-lb)**

High Density Polyethylene Couplings



**Friatec® Frialen
Electrofusion Coupling**

House Sewers: 4” and 6”

Material Type(s): Pipe

Description: Pipe material for house sewers in four (4) and six (6) inch in diameter.

1. PVC Solid Wall–SDR 26
(Solvent Welded Joints)
(Bell & Spigot Joints)
2. ABS Solid Wall Schedule 40
(Solvent Welded Joints)
3. Vitrified Clay Pipe (VCP)
(Bell & Spigot Joints)
(Plain Ended Joints)
4. DIP Class 52
(Bell & Spigot Joints)
5. Cast Iron Soil Pipe (CIP) Class SV
(Bell & Spigot Joints)
(No-Hub)
6. HDPE SDR 17 Gray (Ductile Iron Pipe O.D.)
(Butt Thermal Fused Joints)
(Pipe Bursting or Directional Drilling only or at Inspector’s discretion)
7. PVC Solid Wall C900
(Bell & Spigot Joints)
(DR-14, DR-18, DR-25)

Note: HDPE SDR 17 shall be purchased in longest length practicable in order to achieve the minimum amount of pipe joints during construction. A maximum of ten (10) joints per one hundred foot (100) length of laid pipe shall be achieved, unless all joints are de-beaded.

Overflow Protection Devices

Material Type(s): Overflow Protection Devices (OPD)

Description: Overflow protection devices prevent sewage from entering homes and businesses and reroute the spill outside the building.

Manufacturer:

	MANUFACTURER	PRODUCT NAME
Extendable Backwater Valve	Mainline Backflow Products	Adapt-a-valve Inspection Chamber with Test-Eze Gate Feature
	Rector Seal	Clean Check Backwater Valve
"Mushroom"	Genplex	Kelly Backwater Device (No-Hub & IPS)
Sewer Popper™	Stephens Corp	Sewer Popper™ Model S62-304
Relief Cap	Unlimited Home Solutions LLC (www.unlimitedhomesolutions.com)	Sewer Relief Cap

Extendable Backwater Valves



ABS



PVC



"Mushroom" OPD



Sewer Popper™ OPD



Sewer Relief Cap

Main Sewers: Less than 18”

Material Type(s): Pipe

Description: Pipe material for sewers less than eighteen (18) inches in diameter.

1. PVC Solid Wall–SDR 26
(Bell & Spigot Joints)
2. Ductile Iron CL52
(Bell & Spigot Joints)
3. PVC Solid Wall C900 or C905
(Bell & Spigot Joints)
4. HDPE SR 17 Gray (Ductile Iron Pipe Size O.D.)
(Butt Fused Joints, de-beaded)
5. Vitrified Clay
(Bell & Spigot Joints)

Note: Special approval may be granted by CCCSD for other materials as necessary for the specific application. Material shall be purchased in longest length practicable in order to achieve the minimum number of pipe joints.

Joint Restraint Systems

	MANUFACTURER	JOINT RESTRAINT SYSTEM
DIP	American Ductile Iron Pipe	“Lok-Fast” Restrained Joint
	U.S. Pipe	“TR FLEX” Restrained Joint
	U.S. Pipe	“Field-Lok 350 Gaskets”
PVC	BullDog Restraint System	BullDog PVC Pressure Pipe Integrated Joint Restraint System
	Certain Teed	Certa-Lok restrained joint system

Pipe Fittings: Less than 18" Sewers

Material Type(s): Pipe fittings

Description: Pipe fittings for pipelines that are less than eighteen (18) inches in diameter.

PIPE MATERIAL	FITTING
DIP	Wye, Tee, 11 ¼ ° Fitting, Mechanical Fittings
PVC Solid	Wye, Tee, Closure Coupling
	Saddle Tee, 3° Fitting, 11 ¼ ° Fitting
	90° Sweep Elbow
VCP	Wye, Tee

MANUFACTURER	FLEXIBLE FITTING	MAXIMUM ALLOWABLE FITTING DEFLECTION
Plastic Trends	SDR 26 Gasketed Sewer Fitting	4°
CertainTeed	Cast Iron O.D.	5°
	Iron Pipe Size O.D.	5°



90° Sweep Elbow for pressure side sewers



Saddle Tee Fitting



Wye, Tee Fitting



SDR 26 Heavy Wall Gasketed Sewer Fitting

Taps

Material Type(s): Taps

Description: Tap materials for the corresponding type of main line sewer.

PIPE MATERIAL	MAINLINE TAP
ABS	<ul style="list-style-type: none"> • Sealtite Type “S” Saddle with four (4) band coupling • ABS Saddle with solvent weld and two (2) stainless steel straps
ACP	<ul style="list-style-type: none"> • Fowler Saddle
CIP, DIP	<ul style="list-style-type: none"> • Fowler Saddle • Sealtite Type “S” Saddle with four (4) band coupling
HDPE	<ul style="list-style-type: none"> • Thermal-Fused Saddle
Insituform Liner	<ul style="list-style-type: none"> • PVC Saddle with Rubber Gasket and two (2) stainless steel straps
PVC	<ul style="list-style-type: none"> • Sealtite Type “S” Saddle with four (4) band coupling • PVC Saddle with Rubber Gasket and two (2) stainless steel straps • PVC Saddle with solvent weld and two (2) stainless steel straps
VCP	<ul style="list-style-type: none"> • Fowler Saddle • Sealtite Type “S” Saddle with four (4) band coupling

Note: PVC taps may be done by any General Engineering (“A”) Contractor registered with CCCSD. All other taps must be done by either Tap-Tite Company or Roto-Rooter.



ABS Saddle



Fowler Saddle



HDPE Saddle



PVC Saddle

Ready-Mix Designs

Material Type(s): Concrete mix

Manufacturer:

1. Central Concrete Supply
Phone Number: (408) 404-1030

MIX DESIGNATION	MIX DESIGN #
Controlled Low Strength Material	F35138AA
Cast-in-place Concrete	1EF115Q1
	163115C1

2. Cemex
Phone Number: (650) 333-5357

MIX DESIGNATION	MIX DESIGN #
Controlled Low Strength Material	4212893
Cast-in-place Concrete	4212798

Precast Products

Material Type(s): Precast Products such as Manhole Bases, Barrels, Cones, Grade Rings, Paving Rings, Adjustment Rings, Gaskets, Top Slabs, Grease Interceptors, Sampling Boxes and Sand-Oil Interceptors can be obtained from the following approved manufacturers.

Manufacturer:

1. Central Precast (US Concrete Precast Group)
Phone Number: (925) 960-8740
2. Jensen Precast
Phone Number: (707) 429-5500
3. Cook Concrete Products
Phone Number: (530) 243-2562

Concrete Curing Compounds

Material Type(s): Concrete curing compounds

Description: Curing compounds shall be white pigmented and resin based.

MANUFACTURER	COMPOUND
Master Builders	MB-429
Burke Company	Spartan Cote Cure-Seal Hardener
Euclid Chemical Company	Super Rez Seal

Note: Sodium silicate compounds shall not be used.

Reinforced Concrete Utility Boxes

Material Type(s): Utility boxes for traffic and non-traffic areas

	ITEM DESCRIPTION	PRODUCT
Traffic Area	12" x 12" Drain Box	Christy® V12 Box
	10-3/8" I.D. x 12" Valve Box	Christy® or Jensen® G5 Traffic Valve
	Cast Iron Grate (3/8" Max Spacing) H/20 Loading	Christy® V12-71W Welded Grate
Non-Traffic Area	8" I.D. x 12" Valve Box	Christy® or Jensen® F8 Box
	8-1/2" I.D. x 11-3/4" Drain Box	Christy® V1 Drain Box
	10-5/8" I.D. x 17-1/4" Drain Box	Christy® V9 Drain Box
	Cast Iron Grate 3/4" Max Spacing	Christy® V1-71C Grate and V9-71C Grate



Christy® V12 Box



Christy® G5 Box



Christy® F8 Box



**Christy® V12-71W
Welded Grate**



**Christy® K-6004 Grate
(Special Order)**



**Christy® V1-71C
Grate**

Pump Systems

Material Type(s): Pre-Approved Pump Systems, Pipe

Description:

VENDOR	SYSTEM	PIPE MATERIAL
E-One	D-Series, W-Series, I-Series and G-Series	HDPE (SDR 11) or PVC (Sch 40 or 80)
Liberty	2448- Series, Pro370 Series, Pro380 Series	HDPE (SDR 11) or PVC (Sch 40 or 80)
Aqua Pro Pump Systems	E-Series, EDP Series, ESP-Series, SG-Series, DG-Series	HDPE (SDR 11) or PVC (Sch 40 or 80)

Note: Complete packages are required for Pre-Approved Pump Systems. This includes a pump, alarm panel, isolation and check valves, sump and sump extensions (as required). Individual parts of Pump System are not pre-approved by CCCSD. Models include but are not limited to the ones below, contact CCCSD for special approval of all others.



E-One® Model D-H071



Liberty® 2448 Series



E-One® Model Gator Grinder



Liberty® Pro370-Series
(2" discharge system,
Required Access Riser)



Liberty® Pro380 Series
(2" discharge system,
Required Access Riser)



Aqua Pro SG-1182-2

Grease Traps

(Referred to in the UPC as Hydromechanical Grease Interceptors)

Material Type(s): Grease Traps

Description: Grease traps for trash enclosures with a 4" connector

Manufacturers:

1. Zurn
Phone Number: (805) 238-7100
2. Jay R. Smith Manufacturing Co.
Phone Number: (334) 277-8520
3. Schier Products
Phone Number: 1-800-827-7119
4. Dormont
Phone Number: 1-800-376-6668

MANUFACTURER	PRODUCT
Zurn	Z1165, Z1170, Z1172, GT2700 Grease Interceptors
Jay R. Smith Manufacturing Company	8000-8100 Series
Schier	PATG-2025, PATG-2420
Dormont	WD Series PDI Certified Grease Interceptor



**Jay R. Smith
800-8100 Series**



**Dormont
WD Series**



**Zurn
Z1170**



**Schier Products Trapper II*
PATG-2025 or PATG-2420**

*Designed for indoor use only

Note: Models without a standard 4" connector shall be upgraded to 4".

Miscellaneous Approved Materials

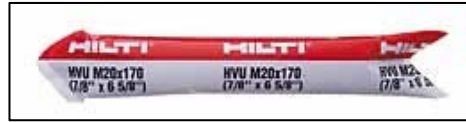
	MANUFACTURER	PRODUCT
D.E. Separation Tanks	Pentair Pool Products	Product # 60 SEP
	Hayward Pool Products	Model # C9002 SEP
Epoxy Adhesive Anchors	Sika	FI System with Sikadur® Injection Gel Epoxy
	Hilti	HIT HY150 Adhesive Anchors
	BASF	Concresive® 1420 Gel Epoxy Adhesive
	BASF	Concresive® Paste LPL
Expanding - Type Anchors	ITW	Red Head®, Trubolt Wedge Anchor
	Hilti	Kwik-Bolt 3 Expansion Anchor
Galvanizing Field Repairs	Carboline®	Galvanox
Glass Capsule Polyester Resin Adhesive Anchors	Hilti	HVU Adhesive Capsule
HubSett™	Rector Seal®	HubSett™
Manhole Sealing Products	J-K Polysource®	External Joint Wrap M-860
	Henry®	Rubr-Nek External Joint Wrap
	ConSeal®	CS-50 Liquid Butyl Primer
	ConSeal®	CS-101 Butyl Sealant for Precast Structures
	Henry®	RAM-NEK Joint Sealant
Transition Cements	Weld-On®	ABS to PVC Transition Cement
	Oatey®	ABS to PVC Transition Green Solvent Cement
Waterstops	Newby	Rubber Water Stop Ring

Miscellaneous Approved Materials

Anchors



Trubolt Wedge Anchor



HVU Adhesive Capsule



HIT HY150 Adhesive Anchor

Miscellaneous



Waterstop Rings



HubSett™

Transition Cements



Oatey® ABS-PVC Cement



Weld-On® ABS-PVC Cement