



Connecticut DOT

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Bureau of Engineering and Construction

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## ENGINEERING & CONSTRUCTION DIRECTIVE

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Chief Engineer

### **Use of All-Inclusive Drainage Items in Contracts**

Future construction contracts will use “all-inclusive” drainage items for pipes, pipe ends, catch basins, manholes, and drop inlets. Designers are directed to include all-inclusive drainage items in all US Customary unit (i.e., other-than-metric) projects with Final Design Plan dates after April 1, 2018, but not earlier. Background and implementation information follow.

Historically and currently, drainage systems installed under Department construction contracts have been bid and paid for under several different contract pay items. For example, a run of drainage pipe would typically have separate items for volume of trench excavation (by depth), length of pipe (by size and type) and volume of bedding material. For all-inclusive items, no separate payment is made for trench excavation or bedding. If the all-inclusive item approach is applied to this example, a single contract item (pipe by size, type and depth) would include payment for all of the above-mentioned work.

The Bureau’s plan for all-inclusive drainage items is to pay for the following items, with two different depths (0’ to 10’ Deep or 0’ to 20’ Deep) for each:

- Rock in Drainage Trench Excavation [c.y.]
- (Type) Catch Basin [ea.]
- Manhole (Size) [ea.]
- Remove Drainage Structure [ea.]
- (Size and Type) Pipe (Thickness) [l.f.]
- (Size and Type) Pipe Arch (Thickness) [l.f.]
- Relaid (Size and Type) Pipe [l.f.]
- (Size and Type) Relaid Pipe Arch [l.f.]
- Remove Existing Pipe [l.f.]

A special provision will be required for any of these items when the depth of excavation to bottom of trench exceeds 20’.

All-inclusive drainage items with Measurement/Basis of Payment of “each” and “linear feet” will include earth excavation, bedding material and backfill.

The use of all-inclusive drainage items will significantly reduce the time field inspection staff spend computing volume-based payment quantities (trench excavation, bedding material) for payment to contractors.

This change in contracting method has no impact on hydraulic design.

To transition from current practice to the all-inclusive drainage item approach, the following are being developed:

- new contract items,
- Guide Sheets, as interim replacements for current Standard Drawings,
- Owned Special Provisions for:
  - Section 2.86 (Drainage Trench Excavation, Rock in Drainage Trench Excavation)
  - Section 5.86 (Catch Basins, Manholes and Drop Inlets)
  - Section 6.86 (Drainage Pipe)
- Notice to Contractor – All Inclusive Drainage
- Revised supporting Owned Special Provisions (e.g., Environmental Compliance).

A preliminary list of new contract items is attached. Since the Master Bid Item List evolves continuously, designers should reference the current list (via the [Contract Development web page](#)) when preparing Final Design documents.

Pre-bid cost estimating of all-inclusive drainage items has been identified as an implementation challenge. AASHTOWare Estimator software will not generate estimated costs for the new (all-inclusive) items until there is adequate bid history. Even for common drainage items, Estimator will not be useful until these new items have been bid for one or two years. Until there is enough bid history for Estimator to generate prices, the cost of all-inclusive drainage items should be estimated by adding the estimated costs of items that were previously bid separately (e.g., pipe, structures, trench excavation, bedding). The Cost Estimating unit will be providing guidance and assistance to design units on this topic.

The new and revised Owned Special Provisions and Notice to Contractor (NTC) will be available through the [Owned Special Provision web page](#) by December 1, 2017.

Designers should plan accordingly.

Attachment: Preliminary list of contract items for all-inclusive drainage

# Preliminary List of Items for Use with All-Inclusive Drainage

Item Number	Description	Units
0286001.1	ROCK IN DRAINAGE TRENCH EXCAVATION 0'-10' DEEP	c.y.
0286001.2	ROCK IN DRAINAGE TRENCH EXCAVATION 0'-20' DEEP	c.y.
0586001.1	TYPE 'C' CATCH BASIN - 0' - 10' DEEP	ea.
0586001.2	TYPE 'C' CATCH BASIN - 0' - 20' DEEP	ea.
0586002.1	TYPE 'C' CATCH BASIN (4'SUMP) - 0' - 10' DEEP	ea.
0586002.2	TYPE 'C' CATCH BASIN (4'SUMP) - 0' - 20' DEEP	ea.
0586003.1	TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 10' DEEP	ea.
0586003.2	TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 20' DEEP	ea.
0586004.1	TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 10' DEEP	ea.
0586004.2	TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 20' DEEP	ea.
0586005.1	TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 10' DEEP	ea.
0586005.2	TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 20' DEEP	ea.
0586006.1	TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 10' DEEP	ea.
0586006.2	TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 20' DEEP	ea.
0586007.1	SPECIAL TYPE 'C' CATCH BASIN - 0' - 10' DEEP	ea.
0586007.2	SPECIAL TYPE 'C' CATCH BASIN - 0' - 20' DEEP	ea.
0586008.1	SPECIAL TYPE 'C' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586008.2	SPECIAL TYPE 'C' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586009.1	SPECIAL TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 10' DEEP	ea.
0586009.2	SPECIAL TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 20' DEEP	ea.
0586010.1	SPECIAL TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 10' DEEP	ea.
0586010.2	SPECIAL TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 20' DEEP	ea.
0586011.1	SPECIAL TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 10' DEEP	ea.
0586011.2	SPECIAL TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 20' DEEP	ea.
0586012.1	SPECIAL TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 10' DEEP	ea.
0586012.2	SPECIAL TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 20' DEEP	ea.
0586013.1	OFFSET TYPE 'C' CATCH BASIN - 0' - 10' DEEP	ea.
0586013.2	OFFSET TYPE 'C' CATCH BASIN - 0' - 20' DEEP	ea.
0586014.1	OFFSET TYPE 'C' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586014.2	OFFSET TYPE 'C' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586020.1	TYPE 'C' DROP INLET - 0' - 10' DEEP	ea.
0586020.2	TYPE 'C' DROP INLET - 0' - 20' DEEP	ea.
0586025.1	SPECIAL ROUND TYPE 'C' CATCH BASIN - 0' - 10' DEEP	ea.
0586025.2	SPECIAL ROUND TYPE 'C' CATCH BASIN - 0' - 20' DEEP	ea.
0586026.1	SPECIAL ROUND TYPE 'C' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586026.2	SPECIAL ROUND TYPE 'C' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586030.1	TYPE 'C-G' CATCH BASIN - 0' - 10' DEEP	ea.
0586030.2	TYPE 'C-G' CATCH BASIN - 0' - 20' DEEP	ea.
0586040.1	TYPE 'C-L' CATCH BASIN - 0' - 10' DEEP	ea.
0586040.2	TYPE 'C-L' CATCH BASIN - 0' - 20' DEEP	ea.
0586041.1	TYPE 'C-L' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586041.2	TYPE 'C-L' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586042.1	TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 10' DEEP	ea.
0586042.2	TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 20' DEEP	ea.
0586043.1	TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 10' DEEP	ea.
0586043.2	TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 20' DEEP	ea.
0586044.1	TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 10' DEEP	ea.
0586044.2	TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 20' DEEP	ea.
0586045.1	TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 10' DEEP	ea.
0586045.2	TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 20' DEEP	ea.
0586046.1	SPECIAL TYPE 'C-L' CATCH BASIN - 0' - 10' DEEP	ea.
0586047.1	SPECIAL TYPE 'C-L' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586047.2	SPECIAL TYPE 'C-L' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586048.1	SPECIAL TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 10' DEEP	ea.
0586048.2	SPECIAL TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 20' DEEP	ea.
0586049.1	SPECIAL TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1(4' SUMP) - 0' - 10' DEEP	ea.
0586049.2	SPECIAL TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1(4' SUMP) - 0' - 20' DEEP	ea.
0586050.1	SPECIAL TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 10' DEEP	ea.
0586050.2	SPECIAL TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 20' DEEP	ea.
0586051.1	SPECIAL TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2(4' SUMP) - 0' - 10' DEEP	ea.
0586051.2	SPECIAL TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2(4' SUMP) - 0' - 20' DEEP	ea.
0586056.1	TYPE 'C-L' DROP INLET - 0' - 10' DEEP	ea.
0586056.2	TYPE 'C-L' DROP INLET - 0' - 20' DEEP	ea.
0586061.1	SPECIAL ROUND TYPE 'C-L' CATCH BASIN - 0' - 10' DEEP	ea.
0586061.2	SPECIAL ROUND TYPE 'C-L' CATCH BASIN - 0' - 20' DEEP	ea.
0586062.1	SPECIAL ROUND TYPE 'C-L' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586100.1	TYPE 'C-M' CATCH BASIN - 0' - 10' DEEP	ea.
0586100.2	TYPE 'C-M' CATCH BASIN - 0' - 20' DEEP	ea.
0586101.1	TYPE 'C-M' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586101.2	TYPE 'C-M' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586102.1	TYPE 'C-M' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 10' DEEP	ea.
0586102.2	TYPE 'C-M' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 20' DEEP	ea.
0586103.1	TYPE 'C-M' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 10' DEEP	ea.
0586103.2	TYPE 'C-M' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 20' DEEP	ea.
0586104.1	TYPE 'C-M' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 10' DEEP	ea.
0586104.2	TYPE 'C-M' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 20' DEEP	ea.
0586105.1	TYPE 'C-M' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 10' DEEP	ea.
0586105.2	TYPE 'C-M' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 20' DEEP	ea.
0586120.1	TYPE 'C-M 2' CATCH BASIN - 0' - 10' DEEP	ea.
0586120.2	TYPE 'C-M 2' CATCH BASIN - 0' - 20' DEEP	ea.
0586121.1	TYPE 'C-M 2' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586121.2	TYPE 'C-M 2' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586122.1	TYPE 'C-M 2' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 10' DEEP	ea.
0586122.2	TYPE 'C-M 2' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 20' DEEP	ea.
0586123.1	TYPE 'C-M 2' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 10' DEEP	ea.
0586123.2	TYPE 'C-M 2' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 20' DEEP	ea.
0586124.1	TYPE 'C-M 2' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 10' DEEP	ea.
0586124.2	TYPE 'C-M 2' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 20' DEEP	ea.
0586125.1	TYPE 'C-M 2' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 10' DEEP	ea.

# Preliminary List of Items for Use with All-Inclusive Drainage

Item Number	Description	Units
0586125.2	TYPE 'C-M 2' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 20' DEEP	ea.
0586150.1	TYPE 'D' CATCH BASIN - 0' - 10' DEEP	ea.
0586150.2	TYPE 'D' CATCH BASIN - 0' - 20' DEEP	ea.
0586151.1	TYPE 'D' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586151.2	TYPE 'D' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586152.1	TYPE 'D' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 10' DEEP	ea.
0586152.2	TYPE 'D' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 20' DEEP	ea.
0586153.1	TYPE 'D' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 10' DEEP	ea.
0586153.2	TYPE 'D' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 20' DEEP	ea.
0586154.1	TYPE 'D' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 10' DEEP	ea.
0586154.2	TYPE 'D' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 20' DEEP	ea.
0586155.1	TYPE 'D' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 10' DEEP	ea.
0586155.2	TYPE 'D' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 20' DEEP	ea.
0586170.1	TYPE 'D-G' CATCH BASIN - 0' - 10' DEEP	ea.
0586170.2	TYPE 'D-G' CATCH BASIN - 0' - 20' DEEP	ea.
0586250.1	TYPE 'P-R-W' CATCH BASIN - 0' - 10' DEEP	ea.
0586250.2	TYPE 'P-R-W' CATCH BASIN - 0' - 20' DEEP	ea.
0586251.1	TYPE 'P-R-W' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.
0586251.2	TYPE 'P-R-W' CATCH BASIN (4' SUMP) - 0' - 20' DEEP	ea.
0586252.1	TYPE 'P-R-W' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 10' DEEP	ea.
0586252.2	TYPE 'P-R-W' CATCH BASIN DOUBLE GRATE TYPE 1 - 0' - 20' DEEP	ea.
0586253.1	TYPE 'P-R-W' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 10' DEEP	ea.
0586253.2	TYPE 'P-R-W' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP) - 0' - 20' DEEP	ea.
0586254.1	TYPE 'P-R-W' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 10' DEEP	ea.
0586254.2	TYPE 'P-R-W' CATCH BASIN DOUBLE GRATE TYPE 2 - 0' - 20' DEEP	ea.
0586255.1	TYPE 'P-R-W' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 10' DEEP	ea.
0586255.2	TYPE 'P-R-W' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP) - 0' - 20' DEEP	ea.
0586260.1	TYPE 'R-P-W' CATCH BASIN - 0' - 10' DEEP	ea.
0586260.2	TYPE 'R-P-W' CATCH BASIN - 0' - 20' DEEP	ea.
0586300.1	OFFSET CATCH BASIN - 0' - 10' DEEP	ea.
0586300.2	OFFSET CATCH BASIN - 0' - 20' DEEP	ea.
0586310.1	SPECIAL TYPE CATCH BASIN - 0' - 10' DEEP	ea.
0586310.2	SPECIAL TYPE CATCH BASIN - 0' - 20' DEEP	ea.
0586311.1	SPECIAL 'BEEHIVE' CATCH BASIN - 0' - 10' DEEP	ea.
0586311.2	SPECIAL 'BEEHIVE' CATCH BASIN - 0' - 20' DEEP	ea.
0586400.1	TYPE 'D-G' ENDWALL - 0' - 10' DEEP	ea.
0586400.2	TYPE 'D-G' ENDWALL - 0' - 20' DEEP	ea.
0586500.1	MANHOLE - 0' - 10' DEEP	ea.
0586500.2	MANHOLE - 0' - 20' DEEP	ea.
0586501.5	MANHOLE (5' DIAMETER) - 0' - 10' DEEP	ea.
0586501.6	MANHOLE (6' DIAMETER) - 0' - 10' DEEP	ea.
0586501.7	MANHOLE (7' DIAMETER) - 0' - 10' DEEP	ea.
0586501.8	MANHOLE (8' DIAMETER) - 0' - 10' DEEP	ea.
0586501.9	MANHOLE (9' DIAMETER) - 0' - 10' DEEP	ea.
0586501.1	MANHOLE (10' DIAMETER) - 0' - 10' DEEP	ea.
0586502.5	MANHOLE (5' DIAMETER) - 0' - 20' DEEP	ea.
0586502.6	MANHOLE (6' DIAMETER) - 0' - 20' DEEP	ea.
0586502.7	MANHOLE (7' DIAMETER) - 0' - 20' DEEP	ea.
0586502.8	MANHOLE (8' DIAMETER) - 0' - 20' DEEP	ea.
0586502.9	MANHOLE (9' DIAMETER) - 0' - 20' DEEP	ea.
0586502.1	MANHOLE (10' DIAMETER) - 0' - 20' DEEP	ea.
0586510.1	SPECIAL MANHOLE - 0' - 10' DEEP	ea.
0586510.2	SPECIAL MANHOLE - 0' - 20' DEEP	ea.
0586511.5	SPECIAL MANHOLE (5' DIAMETER) - 0' - 10' DEEP	ea.
0586511.6	SPECIAL MANHOLE (6' DIAMETER) - 0' - 10' DEEP	ea.
0586511.7	SPECIAL MANHOLE (7' DIAMETER) - 0' - 10' DEEP	ea.
0586511.8	SPECIAL MANHOLE (8' DIAMETER) - 0' - 10' DEEP	ea.
0586511.9	SPECIAL MANHOLE (9' DIAMETER) - 0' - 10' DEEP	ea.
0586511.1	SPECIAL MANHOLE (10' DIAMETER) - 0' - 10' DEEP	ea.
0586512.5	SPECIAL MANHOLE (5' DIAMETER) - 0' - 20' DEEP	ea.
0586512.6	SPECIAL MANHOLE (6' DIAMETER) - 0' - 20' DEEP	ea.
0586512.7	SPECIAL MANHOLE (7' DIAMETER) - 0' - 20' DEEP	ea.
0586512.8	SPECIAL MANHOLE (8' DIAMETER) - 0' - 20' DEEP	ea.
0586512.9	SPECIAL MANHOLE (9' DIAMETER) - 0' - 20' DEEP	ea.
0586512.1	SPECIAL MANHOLE (10' DIAMETER) - 0' - 20' DEEP	ea.
0586550.1	CITY MANHOLE - 0' - 10' DEEP	ea.
0586550.2	CITY MANHOLE - 0' - 20' DEEP	ea.
0586560.1	TIDEGATE MANHOLE - 0' - 10' DEEP	ea.
0586560.2	TIDEGATE MANHOLE - 0' - 20' DEEP	ea.
0586600	RESET CATCH BASIN	ea.
0586601	RESET TYPE 'C' CATCH BASIN	ea.
0586602	RESET TYPE 'C' CATCH BASIN (4' SUMP)	ea.
0586603	RESET TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1	ea.
0586604	RESET TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP)	ea.
0586605	RESET TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2	ea.
0586606	RESET TYPE 'C' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP)	ea.
0586620	RESET TYPE 'C-L' CATCH BASIN	ea.
0586621	RESET TYPE 'C-L' CATCH BASIN (4' SUMP)	ea.
0586622	RESET TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1	ea.
0586623	RESET TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 1 (4' SUMP)	ea.
0586624	RESET TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2	ea.
0586625	RESET TYPE 'C-L' CATCH BASIN DOUBLE GRATE TYPE 2 (4' SUMP)	ea.
0586650	RESET MANHOLE	ea.
0586651	RESET MANHOLE (STORM)	ea.
0586700	CONVERT CATCH BASIN TO TYPE 'C' CATCH BASIN	ea.
0586701	CONVERT CATCH BASIN TO TYPE 'C-L' CATCH BASIN	ea.
0586702	CONVERT CATCH BASIN TO TYPE 'C-G' CATCH BASIN	ea.
0586703	CONVERT CATCH BASIN TO MANHOLE	ea.
0586704	CONVERT MANHOLE TO TYPE 'C' CATCH BASIN	ea.

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Item Number	Description	Units
0586705	CONVERT MANHOLE TO TYPE 'C-L' CATCH BASIN	ea.
0586750	TYPE 'C' CATCH BASIN TOP	ea.
0586751	TYPE 'C' CATCH BASIN TOP DOUBLE GRATE TYPE 1	ea.
0586752	TYPE 'C' CATCH BASIN TOP DOUBLE GRATE TYPE 2	ea.
0586760	TYPE 'C-L' CATCH BASIN TOP	ea.
0586761	TYPE 'C-L' CATCH BASIN TOP DOUBLE GRATE TYPE 1	ea.
0586762	TYPE 'C-L' CATCH BASIN TOP DOUBLE GRATE TYPE 2	ea.
0586780	MANHOLE FRAME AND COVER	ea.
0586790.1	REMOVE DRAINAGE STRUCTURE - 0' - 10' DEEP	ea.
0586790.2	REMOVE DRAINAGE STRUCTURE - 0' - 20' DEEP	ea.
0586801	LAWN DRAIN	ea.
0586805	SPECIAL LAWN DRAIN	ea.
0586820	JUNCTION BOX	ea.
0586850	HYDRODYNAMIC SEPARATOR	ea.
0586850.1	HYDRODYNAMIC SEPARATOR (SITE NO. 1)	ea.
0586850.2	HYDRODYNAMIC SEPARATOR (SITE NO. 2)	ea.
0586850.3	HYDRODYNAMIC SEPARATOR (SITE NO. 3)	ea.
0586850.4	HYDRODYNAMIC SEPARATOR (SITE NO. 4)	ea.
0586850.5	HYDRODYNAMIC SEPARATOR (SITE NO. 5)	ea.
0586850.6	HYDRODYNAMIC SEPARATOR (SITE NO. 6)	ea.
0686000.1	10" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.12	12" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.15	15" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.18	18" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.21	21" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.24	24" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.27	27" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.3	30" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.36	36" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.42	42" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.48	48" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.54	54" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.6	60" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.66	66" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.72	72" R.C. PIPE - 0' - 10' DEEP	l.f.
0686000.84	84" R.C. PIPE - 0' - 10' DEEP	l.f.
0686001.1	10" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.12	12" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.15	15" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.18	18" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.21	21" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.24	24" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.27	27" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.3	30" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.36	36" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.42	42" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.48	48" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.54	54" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.6	60" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.66	66" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.72	72" R.C. PIPE - 0' - 20' DEEP	l.f.
0686001.84	84" R.C. PIPE - 0' - 20' DEEP	l.f.
0686002.1	10" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.12	12" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.15	15" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.18	18" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.21	21" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.24	24" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.27	27" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.3	30" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.36	36" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.42	42" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.48	48" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.54	54" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.6	60" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.66	66" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.72	72" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.84	84" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.9	90" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686002.96	96" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686003.1	10" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.12	12" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.15	15" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.18	18" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.21	21" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.24	24" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.27	27" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.3	30" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.36	36" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.42	42" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.48	48" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.54	54" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.6	60" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.66	66" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.72	72" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.84	84" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686003.9	90" R.C. PIPE (CLASS V) - 0' - 20' DEEP	l.f.
0686010.1	JACKING 10" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.
0686010.12	JACKING 12" R.C. PIPE (CLASS V) - 0' - 10' DEEP	l.f.



# Preliminary List of Items for Use with All-Inclusive Drainage

Item Number	Description	Units
0686018.3	RELAID 30" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686018.36	RELAID 36" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686018.42	RELAID 42" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686018.48	RELAID 48" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686018.54	RELAID 54" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686018.6	RELAID 60" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686018.66	RELAID 66" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686018.72	RELAID 72" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686018.84	RELAID 84" R.C. PIPE CLASS V - 0' - 20' DEEP	f.f.
0686020.24	24" RCP CLASS V - 0' - 10' DEEP	f.f.
0686050.1	14" X 23" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686050.2	14" X 23" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686050.3	14" X 23" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686050.4	14" X 23" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686051.1	18" X 28.5" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686051.2	18" X 28.5" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686051.3	18" X 28.5" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686051.4	18" X 28.5" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686052.1	19" X 30" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686052.2	19" X 30" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686052.3	19" X 30" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686052.4	19" X 30" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686053.1	24" X 38" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686053.2	24" X 38" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686053.3	24" X 38" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686053.4	24" X 38" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686053.5	24" X 38" R.C. PIPE ELLIPTICAL (SPECIAL CLASS) - 0' - 10' DEEP	f.f.
0686053.6	24" X 38" R.C. PIPE ELLIPTICAL (SPECIAL CLASS) - 0' - 20' DEEP	f.f.
0686055.1	29" X 45" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686055.2	29" X 45" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686055.3	29" X 45" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686055.4	29" X 45" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686056.1	34" X 53" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686056.2	34" X 53" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686056.3	34" X 53" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686056.4	34" X 53" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686057.1	38" X 60" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686057.2	38" X 60" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686057.3	38" X 60" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686057.4	38" X 60" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686058.1	43" X 68" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686058.2	43" X 68" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686058.3	43" X 68" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686058.4	43" X 68" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686059.1	48" X 76" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686059.2	48" X 76" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686059.3	48" X 76" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686059.4	48" X 76" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686060.1	53" X 83" R.C. PIPE ELLIPTICAL - 0' - 10' DEEP	f.f.
0686060.2	53" X 83" R.C. PIPE ELLIPTICAL - 0' - 20' DEEP	f.f.
0686060.3	53" X 83" R.C. PIPE ELLIPTICAL CLASS V - 0' - 10' DEEP	f.f.
0686060.4	53" X 83" R.C. PIPE ELLIPTICAL CLASS V - 0' - 20' DEEP	f.f.
0686100.6	6" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.1	10" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.12	12" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.15	15" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.18	18" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.21	21" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.24	24" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.27	27" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.3	30" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.33	33" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.36	36" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.42	42" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.48	48" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.54	54" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.6	60" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.66	66" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686100.72	72" C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686101.6	6" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.1	10" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.12	12" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.15	15" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.18	18" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.21	21" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.24	24" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.27	27" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.3	30" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.33	33" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.36	36" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.42	42" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.48	48" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.54	54" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.6	60" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.66	66" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686101.72	72" C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686102.6	6" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.1	10" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.12	12" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.

# Preliminary List of Items for Use with All-Inclusive Drainage

Item Number	Description	Units
0686102.15	15" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.18	18" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.21	21" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.24	24" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.27	27" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.3	30" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.33	33" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686102.36	36" C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686103.6	6" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.1	10" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.12	12" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.15	15" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.18	18" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.21	21" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.24	24" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.27	27" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.3	30" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.33	33" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686103.36	36" C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686120.6	6" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.8	8" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.1	10" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.12	12" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.15	15" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.18	18" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.21	21" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.24	24" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.27	27" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.3	30" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.33	33" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.36	36" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.42	42" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.48	48" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.54	54" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.6	60" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.66	66" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686120.72	72" A.C.C.M. PIPE - 0' - 10' DEEP	f.f.
0686121.6	6" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.8	8" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.1	10" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.12	12" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.15	15" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.18	18" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.21	21" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.24	24" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.27	27" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.3	30" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.33	33" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.36	36" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.42	42" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.48	48" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.54	54" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.6	60" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.66	66" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686121.72	72" A.C.C.M. PIPE - 0' - 20' DEEP	f.f.
0686122.6	6" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.8	8" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.1	10" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.12	12" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.15	15" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.18	18" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.21	21" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.24	24" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.27	27" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.3	30" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.33	33" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686122.36	36" A.C.C.M. PIPE ELBOW - 0' - 10' DEEP	f.f.
0686123.6	6" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.8	8" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.1	10" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.12	12" A.C.C.M. PIPE ELBOW - 0' - 2' DEEP	f.f.
0686123.15	15" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.18	18" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.21	21" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.24	24" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.27	27" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.3	30" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.33	33" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686123.36	36" A.C.C.M. PIPE ELBOW - 0' - 20' DEEP	f.f.
0686200.2	2" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.4	4" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.6	6" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.8	8" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.1	10" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.12	12" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.15	15" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.18	18" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.24	24" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.
0686200.36	36" POLYVINYL CHLORIDE PIPE - 0' - 10' DEEP	f.f.







# Preliminary List of Items for Use with All-Inclusive Drainage

Item Number	Description	Units
0686361.3	30" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686361.36	36" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686361.42	42" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686361.48	48" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686361.54	54" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686361.6	60" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686361.66	66" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686361.72	72" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686361.84	84" ALUMINIZED CORRUGATED METAL PIPE (SMOOTH INTERIOR) - 0'- 20' DEEP	I.f.
0686370.12	12" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.15	15" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.18	18" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.24	24" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.3	30" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.36	36" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.42	42" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.48	48" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.54	54" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.6	60" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.66	66" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.72	72" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686370.84	84" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 10' DEEP	I.f.
0686371.12	12" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.15	15" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.18	18" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.24	24" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.3	30" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.36	36" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.42	42" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.48	48" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.54	54" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.6	60" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.66	66" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.72	72" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686371.84	84" ALUMINIZED CORRUGATED METAL PIPE (TYPE II) - 0' - 20' DEEP	I.f.
0686700.12	12" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.15	15" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.18	18" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.24	24" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.3	30" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.36	36" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.42	42" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.48	48" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.54	54" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.6	60" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.66	66" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.72	72" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686700.84	84" REINFORCED CONCRETE DRAINAGE PIPE END	ea.
0686710.12	12" METAL DRAINAGE PIPE END	ea.
0686710.15	15" METAL DRAINAGE PIPE END	ea.
0686710.18	18" METAL DRAINAGE PIPE END	ea.
0686710.24	24" METAL DRAINAGE PIPE END	ea.
0686710.3	30" METAL DRAINAGE PIPE END	ea.
0686710.36	36" METAL DRAINAGE PIPE END	ea.
0686710.42	42" METAL DRAINAGE PIPE END	ea.
0686710.48	48" METAL DRAINAGE PIPE END	ea.
0686710.54	54" METAL DRAINAGE PIPE END	ea.
0686710.6	60" METAL DRAINAGE PIPE END	ea.
0686710.66	66" METAL DRAINAGE PIPE END	ea.
0686710.72	72" METAL DRAINAGE PIPE END	ea.
0686750	15" X 21" METAL DRAINAGE PIPE END	ea.
0686751	21" X 15" METAL DRAINAGE PIPE END	ea.
0686752	24" X 18" METAL DRAINAGE PIPE END	ea.
0686753	29" X 18" METAL DRAINAGE PIPE END	ea.
0686754	33" X 49" METAL DRAINAGE PIPE END	ea.
0686755	42" X 29" METAL DRAINAGE PIPE END	ea.
0686900	CONCRETE PIPE CONNECTION	ea.
0686950.1	REMOVE EXISTING PIPE - 0' - 10' DEEP	I.f.
0686950.2	REMOVE EXISTING PIPE - 0' - 20' DEEP	I.f.