APPENDIX C-1
PREFERRED ALTERNATIVE PLANS AND DETAILS

N

SEE THIS SHEET

24" 22-1/2° BEND (M/J ANC.)

24" 22-1/2° BEND (M/J ANC.)

CROSS RIVER DRIVE DRAINAGE CROSSING

667' OF (1,527') OF 24" DUCTILE IRON PIPE

CROSS RIVER DRIVE (C.R.-105)

24" BUTTERFLY VALVE & BOX

36" X 24" REDUCER (M/J)

EXISTING 36" CAP (M/J)

10+67

EXISTING 36" D.I.P. (DRY MAIN) (11-03-288)

EXISTING 36" 45° BEND

9+67.5

FLANDERS ROAD (S.R.-24)

16"T.I.

TO WHITEBROOK DR

16-K
6

EXISTING 36" X 24" REDUCER W/1-24" RTG, 1-36" RTG

EXISTING 24" 90° BEND

EXISTING 60' OF 36" STL CASING & 60' OF 24" TR FLEX-LOCK PIPE

0+04.5

0+00

0+00

0+05

0+65

FLANDERS ROAD (S.R.-24)

EXISTING 36" D.I.P. (DRY MAIN) (11-03-288)

EXISTING HYDRANT #577001-000

16-K
4

0+69

EXISTING 24" CAP (M/J)

BELL AVENUE

12"T.I.

T.I.9

B

EQUIPMENT STAGING (100 ft)

SEE SHEET 2

B

SILTATION FENCING (TYPICAL)

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

PECONIC RIVERINE CROSSING

CROSS RIVER DRIVE (C.R.-105)

860' OF (1,527') OF 24" DUCTILE IRON PIPE

SEE THIS SHEET

A

A

Option #5

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7411029-(1)

Notes:
-All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
-Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 3/23/2026	Town: FLANDERS/RIVERHEAD/LAUREL
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 1 Of 14	Township: RIVERHEAD/SOUTHOLD
		Contractor:	Map. No: 16L/17L/18L	Serv. Order No:	# of Services:	Fire Dist:
		In Service Date:		Main Order No:		Main Project:
		Compl. Dwg. By:	Date:	Hyatt Order No:		Hyatt Project:

N

SEE THIS SHEET

EQUIPMENT STAGING (100 ft)

SILTATION FENCING (TYPICAL)

300' OF (3,751') OF 24" DUCTILE IRON PIPE

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

INDIAN ISLAND COUNTRY CLUB
TAX MAP ID: 0600132000100003000
OWNER: COUNTY OF SUFFOLK

RIVERHEAD YACHT CLUB
TAX MAP ID: 0600130000400028000
OWNER: RIVERHEAD YACHT CLUB INC

PECONIC RIVER
TAX MAP ID: 0600132000100004000
OWNER: TOWN OF RIVERHEAD

PECONIC RIVER
TAX MAP ID: 0600130000400029000
OWNER: TOWN OF RIVERHEAD

CROSS RIVER DRIVE (C.R.-105)

PECONIC RIVER
TAX MAP ID: 0600139000100029000
OWNER: TOWN OF SOUTHAMPTON

PECONIC RIVER
TAX MAP ID: 0600154000100007000
OWNER: STATE OF NEW YORK

PECONIC RIVERINE CROSSING

DIRECTIONAL DRILL 1,951'
OF 24" H.D.P.E. (DR-11)

CULVERT

SILTATION FENCING (TYPICAL)

SEE SHEET 1

SEE SHEET 3

INDIAN ISLAND COUNTRY CLUB
TAX MAP ID: 0600132000100002000
OWNER: COUNTY OF SUFFOLK

1,180' OF (3,751') OF 24" DUCTILE IRON PIPE

RIVERSIDE DRIVE

INDIAN ISLAND COUNTRY CLUB
TAX MAP ID: 0600132000100003000
OWNER: COUNTY OF SUFFOLK

SEE THIS SHEET

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

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INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7411029-(2)

Notes:
-All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
-Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 3/23/2026
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 2 of 14
		Contractor:	Insp. for W/O #:	Work Order No:	# of Services:
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: FLANDERS/RIVERHEAD/LAUREL
Township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hyatt Project:

N

E

SEE THIS SHEET

E

CB

24" 22-1/2° BEND (M/J)

TAX MAP ID: 0600112000200001001
OWNER: WILLIAM GATZ

1,150' OF (3,751') OF 24" DUCTILE IRON PIPE

CROSS RIVER DRIVE (C.R.-105)

TAX MAP ID: 0600112000100016001
OWNER: COUNTY OF SUFFOLK

24" 22-1/2° BEND (M/J)

24" 22-1/2° BEND (M/J)

TAX MAP ID: 0600112000200001001
OWNER: WILLIAM GATZ

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

PECONIC RIVER

SAW CREEK CROSSING

TAX MAP ID: 0600132000100004000
OWNER: TOWN OF RIVERHEAD

48" x 76" RCCP

48" x 76" RCCP

48" x 76" RCCP

PECONIC RIVER
TAX MAP ID: 0600132000100001000
OWNER: TOWN OF RIVERHEAD

24" 45° BEND (M/J ANC.)

24" 45° BEND (M/J ANC.)

D

SEE SHEET 2

D

F

SEE SHEET 4

F

INDIAN ISLAND COUNTY PARK
TAX MAP ID: 0600112000200002001
OWNER: COUNTY OF SUFFOLK

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

24" 11-1/4° BEND (M/J)

24" 11-1/4° BEND (M/J)

CROSS RIVER DRIVE (C.R.-105)

SERVICE RD

24" 11-1/4° BEND (M/J)

INDIAN

POINT RD

24" 11-1/4° BEND (M/J)

24" 11-1/4° BEND (M/J)

1,121' OF (3,751') OF 24" DUCTILE IRON PIPE

INDIAN ISLAND COUNTY PARK
TAX MAP ID: 0600112000200002001
OWNER: COUNTY OF SUFFOLK

E

SEE THIS SHEET

E

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

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INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority

4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: **WATER MAIN INSTALLATION**

Dwg. No.: **7411029-(3)**

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations				
Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 3/23/2026	Town: FLANDERS/RIVERHEAD/LAUREL
Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 3 Of 14	Township: RIVERHEAD/SOUTHOLD
Contractor:	Map No: 16, 17, 18	Serv. Order No:	# of Services:	Fire Dist:
In Service Date:		Main Order No:		Main Project:
Compl. Dwg. By:	Date:	Hyatt Order No:		Hyatt Project:



NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Suffolk County Water Authority

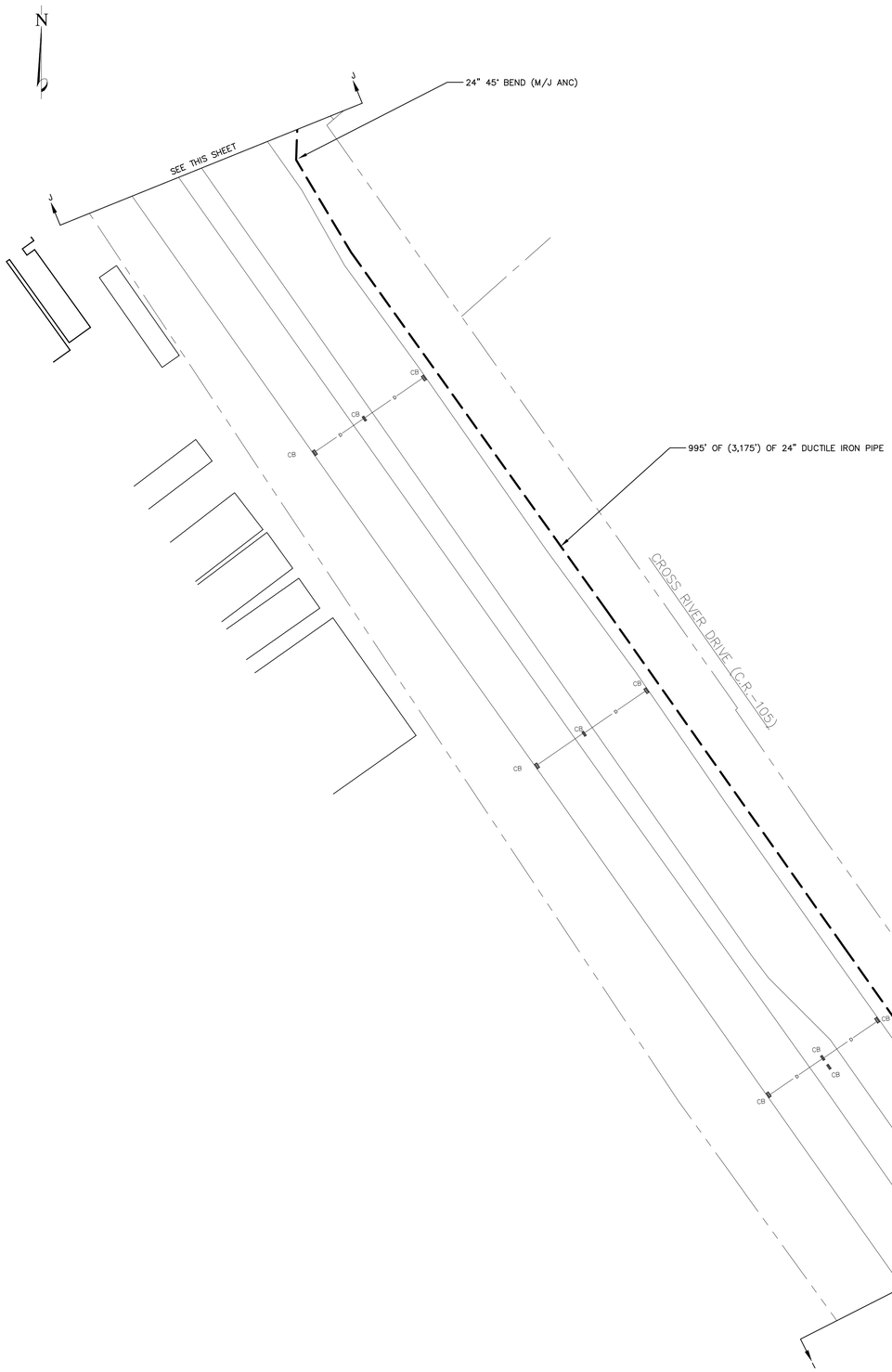
4060 Sunrise Highway
Oakdale, NY 11769

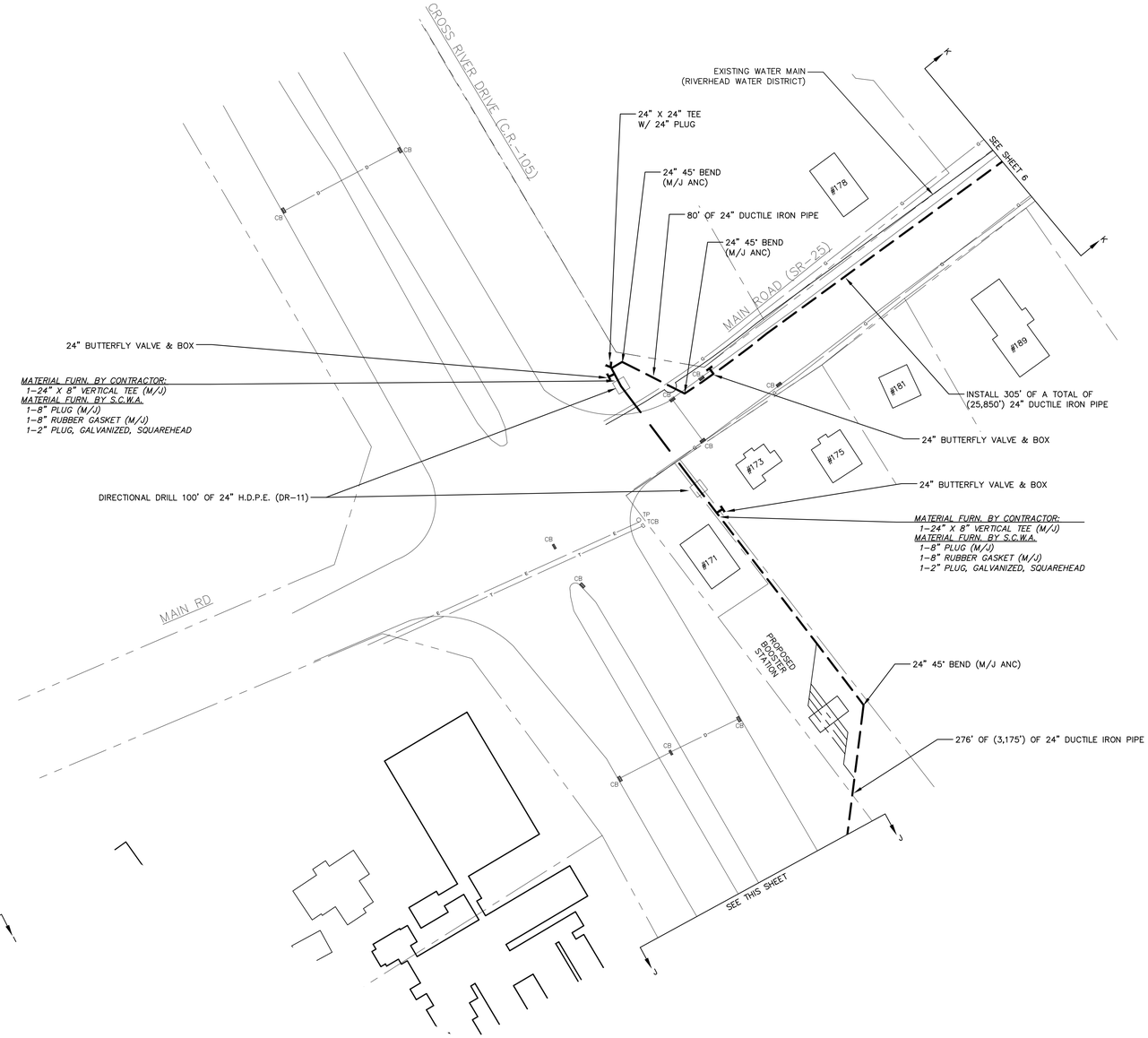
Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7411029-(4)

Reference Authorizations					
		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 3/23/2026
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 4 Of 14
		Contractor:	Map No: 16, 17, 18	Serv. Order No:	# of Services:
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

town: FLANDERS/RIVERHEAD/LAUREL
township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hyatt Project:





NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Suffolk County Water Authority

4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7411029-(5)

Reference Authorizations		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 3/23/2026
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 5 Of 14
		Contractor:	Map No: 16, 17, 18, 19	Serv. Order No:	# of Services:
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: FLANDERS/RIVERHEAD/LAUREL
Township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hyatt Project:

N

INSTALL 1,350' OF A TOTAL OF (25,850') OF 24" DUCTILE IRON PIPE

#268

#272

(SR-25)

SHADE TREE LANE

SEE THIS SHEET

#250

#299

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

#236

MAIN ROAD

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

#269

EXIST. RWD HYDRANT

#243

LINDA AVENUE

#212

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

#188

MH

BROAD AVENUE

SEE SHEETS

#199

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

EXIST. RWD HYDRANT

#396

SEE SHEET 7

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

(SR-25)

CB

EXIST. RWD HYDRANT

UNION AVENUE

#711

INSTALL 1,300' OF A TOTAL OF (25,850') OF 24" DUCTILE IRON PIPE

#373

#357

#347

MAIN ROAD

#290

SEE THIS SHEET

EXIST. RWD HYDRANT

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

#292

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority

4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

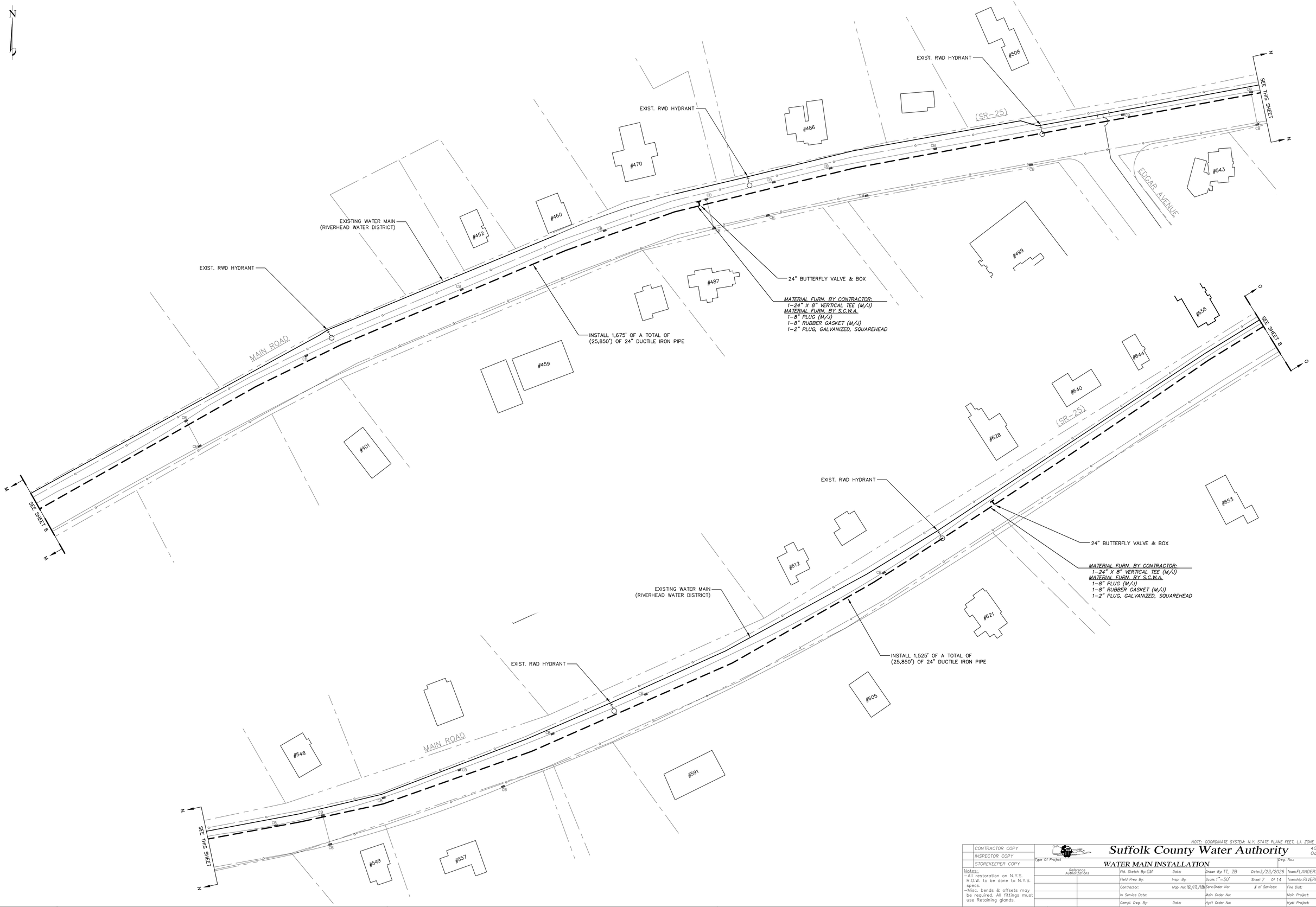
Dwg. No.: 7411029-(6)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations				
		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB
		Field Prep By:	Insp. By:	Scale: 1"=50'
		Contractor:	Map. No: 16, 17, 18	Serv. Order No:
		In Service Date:		Main Order No:
		Compl. Dwg. By:	Date:	Hyatt Order No:

Date: 3/23/2026 | Sheet 6 of 14 | # of Services:

town: FLANDERS/RIVERHEAD/LAUREL
township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hyatt Project:



NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Suffolk County Water Authority

4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7411029-(7)

Reference Authorizations				
		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB Date: 3/23/2026
		Field Prep By:	Insp. By:	Scale: 1"=50' Sheet 7 of 14
		Contractor:	Map No: 16, 17, 18	Serv. Order No: # of Services:
		In Service Date:		Main Order No:
		Compl. Dwg. By:	Date:	Hyatt Order No:

Town: FLANDERS/RIVERHEAD/LAUREL
Township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hyatt Project:



NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION
Dwg. No.: 7411029-(8)

Reference Authorizations					
		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 3/23/2026
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 8 Of 14
		Contractor:	Map No: 16/17/18/19	Serv. Order No:	# of Services:
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hydt Order No:	

Town: FLANDERS/RIVERHEAD/LAUREL
Township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hydt Project:

N

EXIST. RWD HYDRANT

#908 #914 #918 #926 #952 #978

MAIN ROAD

SEE SHEET 8

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

#921

COLONIAL DRIVE

#939 #949 #965 #967

#965

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

EXIST. RWD HYDRANT

#1000 #1008

(SR-25)

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

SEE THIS SHEET

#1017

INSTALL 1,575' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

#1074 #1086

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

EXIST. RWD HYDRANT

#1062 #1054

MAIN ROAD

#1089 #1091 #1095

#1071

INSTALL 1,640' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

24" BUTTERFLY VALVE & BOX

SEE THIS SHEET

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

#1146

TUTHILLS LANE

(SR-25)

EXIST. RWD HYDRANT

#1158

SEE SHEET 10

SEE THIS SHEET

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

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Type Of Project

Suffolk County Water Authority

4060 Sunrise Highway
Oakdale, NY 11769

WATER MAIN INSTALLATION

Dwg. No.: 7411029-(9)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 1/23/2026	Town: FLANDERS/RIVERHEAD/LAUREL	
Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 9 Of 14	Township: RIVERHEAD/SOUTHOLD	
Contractor:	Map No: 16/17/18	Serv. Order No:	# of Services:	Fire Dist:	
In Service Date:		Main Order No:		Main Project:	
Compl. Dwg. By:	Date:	Hyatt Order No:		Hyatt Project:	

N

#1176

#1234

#1260

#1158

#1246

#1284

#1197

#1223

#1279

#1291

#1291

MAIN ROAD

(SR-25)

EXIST. RWD HYDRANT

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

EXIST. RWD HYDRANT

EXIST. RWD HYDRANT

SEE SHEET 9

SEE THIS SHEET

INSTALL 1,625' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

#1308

#1322

#1350

#1374

#1396

#1424

#1327

#1403

#1427

MAIN ROAD

(SR-25)

WASHINGTON AVENUE

EXIST. RWD HYDRANT

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

EXIST. GAS BOX

EXIST. GAS BOX

EXIST. GAS MAN HOLE

EXIST. GAS MAN HOLE

EXIST. GAS VENT

EXIST. GAS MAN HOLE

EXIST. GAS VENT

EXIST. GAS VENT

SEE THIS SHEET

SEE SHEET 11

INSTALL 1,650' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

EXIST. RWD HYDRANT

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

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INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: **WATER MAIN INSTALLATION**

Dwg. No.: 7411029-(10)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 1/23/2026
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 10 Of 14
		Contractor:	Map No: 16/17/18	Serv. Order No:	# of Services:
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: FLANDERS/RIVERHEAD/LAUREL
Township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hyatt Project:

N

SEE THIS SHEET

(SR-25)

#1520

#1549

#1508

#1500

#1492

#1527

EXIST. RWD HYDRANT

INSTALL 1,500' OF A TOTAL OF (25,850') OF 24" DUCTILE IRON PIPE

#1448

#1456

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

MAIN ROAD

#1491

CIRCLE DRIVE

EXIST. RWD HYDRANT

SEE SHEET 10

#5

#1451

#1469

EXIST. RWD HYDRANT

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

SEE SHEET 12

#1636

EXIST. RWD HYDRANT

(SR-25)

#1622

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

#1612

MANOR LANE

#1604

INSTALL 1,265' OF A TOTAL OF (25,850') OF 24" DUCTILE IRON PIPE

#1627

#1590

#1615

#1586

24" BUTTERFLY VALVE & BOX

#1572

MAIN ROAD

#1601

#1607

#1697

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

#1566

#1564

#1560

#1556

S. JAMESPORT AVENUE

#1563

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

SEE THIS SHEET

EXISTING WATER MAIN (RIVERHEAD WATER DISTRICT)

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7411029-(11)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
		Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 3/23/2026
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 11 Of 14
		Contractor:	Map. No: 16,17,18	Serv. Order No:	# of Services:
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hydt Order No:	

Town: FLANDERS/RIVERHEAD/LAUREL
Township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hydt Project:

N

SEE THIS SHEET

EXIST. RWD HYDRANT

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

(SR-25)

ZIEMACKI LANE

#1728

#1722

#1785

#1739

#1727

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

EXIST. RWD HYDRANT

#1716

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

#1696

#1717

#1686

#1676

MAIN ROAD

EXIST. RWD HYDRANT

INSTALL 1,300' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

#1662

W

SEE SHEET 11

W

#1661

SEE SHEET 13

#1844

#1834

(SR-25)

#1830

#1847

#1833

EXIST. RWD HYDRANT

#1825

#1819

#1811

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

INSTALL 1,150' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

MAIN ROAD

#1746

24" BUTTERFLY VALVE & BOX

X

SEE THIS SHEET

X

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Notes:
-All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
-Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations

Suffolk County Water Authority

4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7411029-(12)

Fld. Sketch By: CM	Date:	Drawn By: TT, ZB	Date: 3/23/2026
Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 12 Of 14
Contractor:	Map No: 16/17/18	Serv. Order No:	# of Services:
In Service Date:		Main Order No:	
Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: FLANDERS/RIVERHEAD/LAUREL
Township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hyatt Project:

N

SEE THIS SHEET

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

24" 22½° BEND (M/J)

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

(SR-25)

#12

INSTALL 1,200' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

24" BUTTERFLY VALVE & BOX

HERRICKS LANE

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

#1882

#1915

EXIST. RWD HYDRANT

#1870

#1961

#1860

MAIN ROAD

#1875

SEE SHEET 12

Y

Y

AA

SEE SHEET 14

AA

#2040

(SR-25)

#2026

#2014

#2057

EXIST. RWD HYDRANT

#2004

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

INSTALL 1,340' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

#1998

#2041

#1982

#2015

#1997

#1960

#1995

MAIN ROAD

#1977

#1987

EXIST. RWD HYDRANT

Z

SEE THIS SHEET

Z

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7411029-(13)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations				
Fld. Sketch By: CM / NE	Date:	Drawn By: TT, ZB	Date: 3/23/2026	Town: FLANDERS/RIVERHEAD/LAUREL
Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 13 Of 14	Township: RIVERHEAD/SOUTHOLD
Contractor:	Map No: 16/17/18	Serv. Order No:	# of Services:	Fire Dist:
In Service Date:		Main Order No:		Main Project:
Compl. Dwg. By:	Date:	Hyatt Order No:		Hyatt Project:

N

AB

SEE THIS SHEET

AB

(SR-25)

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

#2167

#2120

CB

INSTALL 1,390' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

#2151

#2092

#2125

EXIST. RWD HYDRANT

#2074

MAIN ROAD

24" BUTTERFLY VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

#2050

AA

SEE SHEET 13

AA

#2065

#2075

18M

37

16" T.I.

FRANKLINVILLE RD.

MAIN ROAD

1+00.5

EXISTING 1-6"
PLUG (M/J)

0+00

0+02.5

0+06

0+08.5

0+00

EXISTING 6" VALVE & BOX

EXISTING 16" X 6" REDUCER (M/J)

EXISTING 16" X 16" TEE (M/J)

EXISTING 16" BUTTERFLY VALVE & BOX

0+36

0+68.5

EXISTING 16" 45° BEND (M/J) ANC.

EXISTING 16" 45° BEND (M/J) ANC.

#775

(005-20-50-0023)

1+35

2+01.5

EXISTING 2" AUTOMATIC BLOW-OFF

EXISTING SCWA HYDRANT
#810005-007

16" BUTTERFLY VALVE & BOX

24" X 16" REDUCER (M/J)

MATERIAL FURN. BY CONTRACTOR:
1-24" X 8" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-8" PLUG (M/J)
1-8" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

(SR-25)

CB

#800

INSTALL 980' OF A TOTAL OF
(25,850') OF 24" DUCTILE IRON PIPE

MAIN ROAD

EXIST. RWD HYDRANT

#2168

#50

EXISTING WATER MAIN
(RIVERHEAD WATER DISTRICT)

AB

SEE THIS SHEET

AB

LAUREL LANE

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

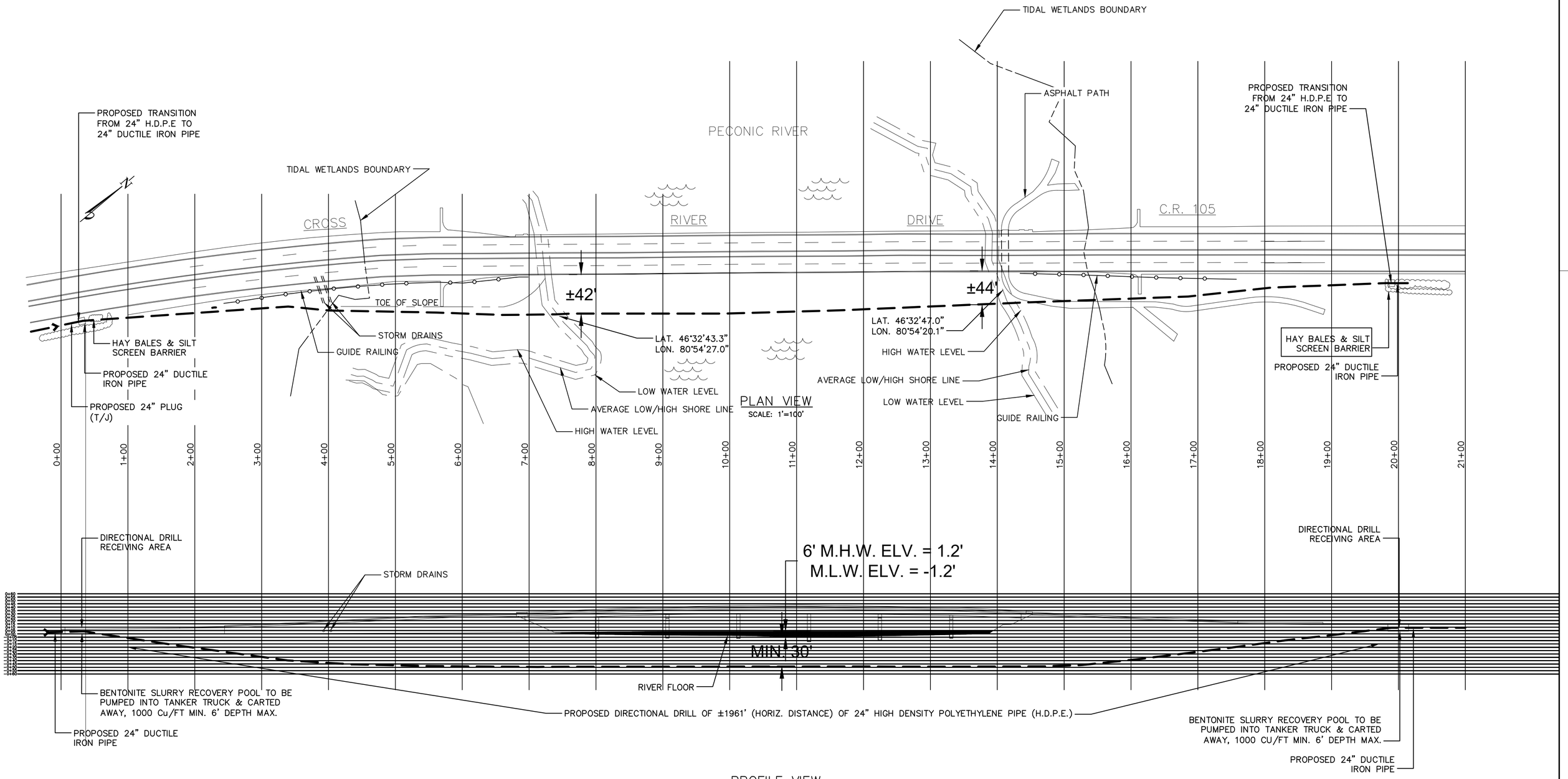
Dwg. No.: 7411029-(14)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
		Fld. Sketch By: CM / NE	Date:	Drawn By: TT, ZB	Date: 3/23/2026
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 14 Of 14
		Contractor:	Map No: 16,17,18M	Serv. Order No:	# of Services:
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: FLANDERS/RIVERHEAD/LAUREL
Township: RIVERHEAD/SOUTHOLD
Fire Dist:
Main Project:
Hyatt Project:

T



NOTE:
NO DEWATERING TO BE DONE

NOTE

THE EDUCATION DEPARTMENT OF THE STATE OF NEW YORK PROHIBITS ANY PERSONS FROM ALTERING ANYTHING ON THESE DRAWINGS AND/OR ACCOMPANYING SPECIFICATIONS UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER; WHERE SUCH ALTERATIONS ARE MADE, THE COGNIZANT PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE REVISIONS ON THE DRAWINGS AND/OR SPECIFICATIONS (SEE SECTION 7209 PAR 2)

REVISIONS

NO.	DATE	DESCRIPTION
–	–	–

LEGEND

Proposed 24" H.D.P.E.

Proposed 24" D.I.P

HAY BALES

PHOTO DIRECTION (A)

SCWA

SUFFOLK COUNTY WATER AUTHORITY

CONSTRUCTION – MAINTENANCE / DRAFTING DEPARTMENT
4060 SUNRISE HIGHWAY
OAKDALE, NY 11769

PROPOSED PECONIC RIVER CROSSING AT C.R. 105

DIRECTIONAL DRILLING OF:
24" HIGH DENSITY POLYETHYLENE
TOWN OF FLANDERS
TOWNSHIP(S) OF RIVERHEAD & SOUTHAMPTON

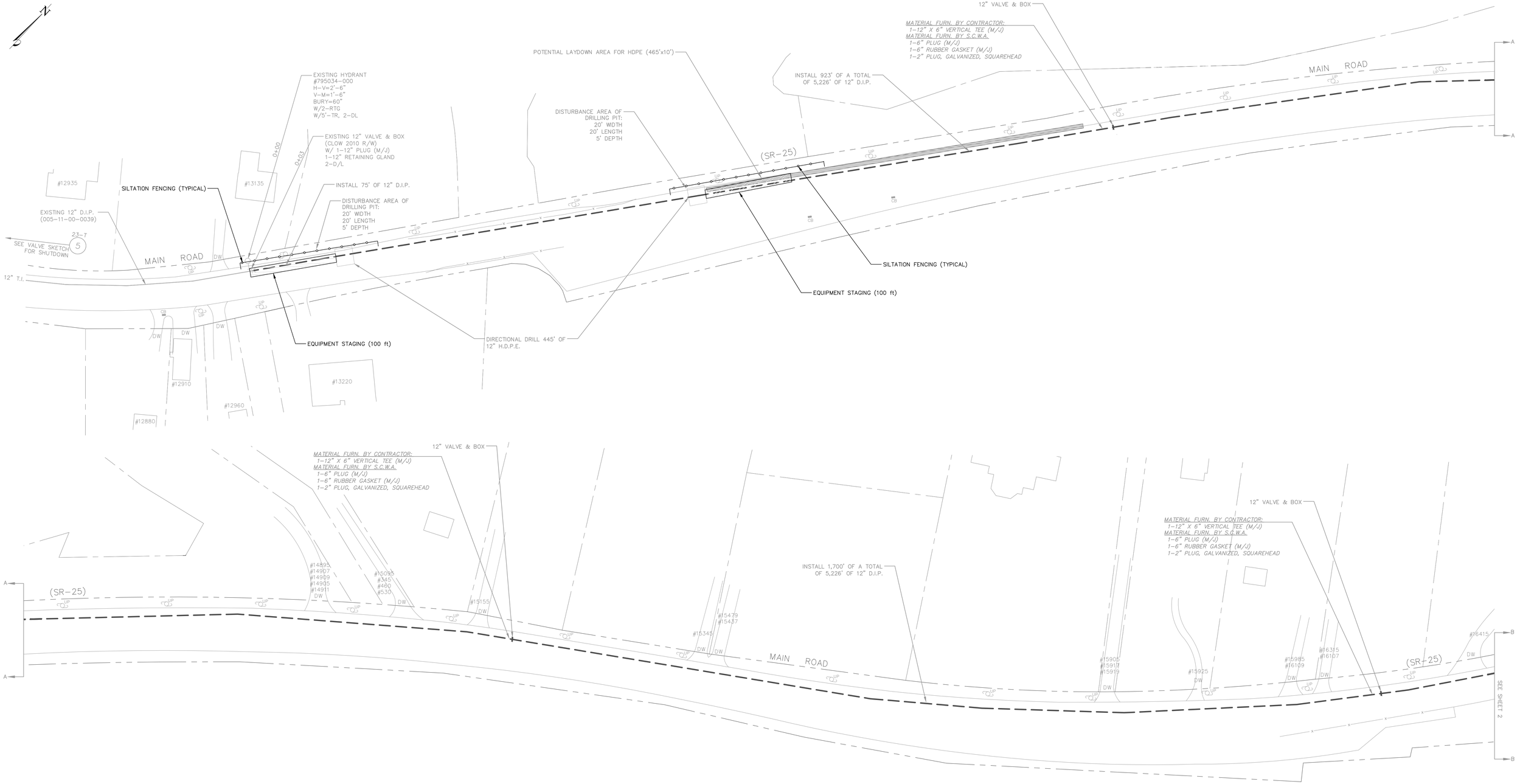
DATE	08/17/2010	DRAWN BY	MAB
SCALE	1"=100'	DRAWN BY	

GO #

DIST MAP	PROP ID
–	

AUTH NO.
–

DWG/FILE
PECONIC RIVER DIRECTION DRILL.dwg



NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

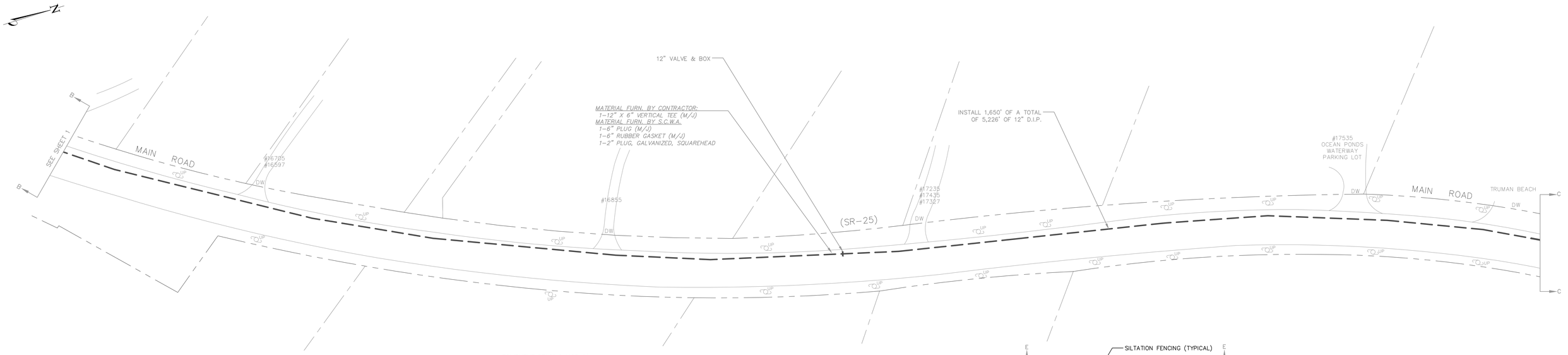
Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

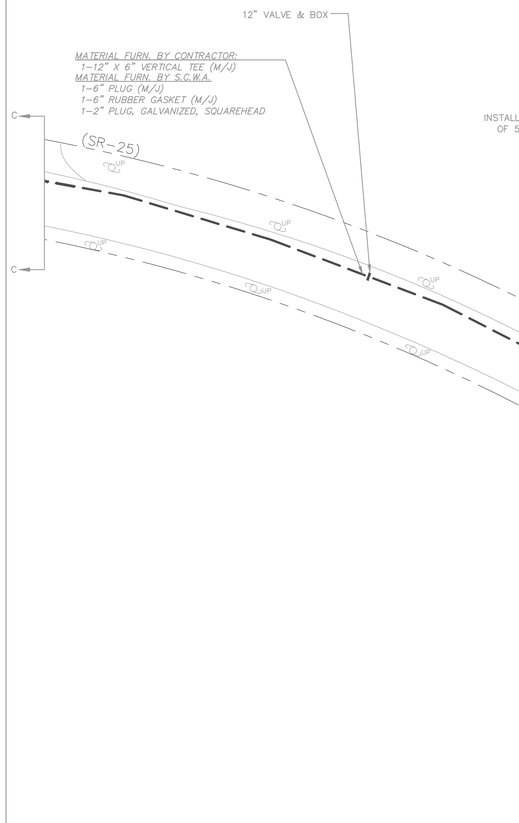
Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

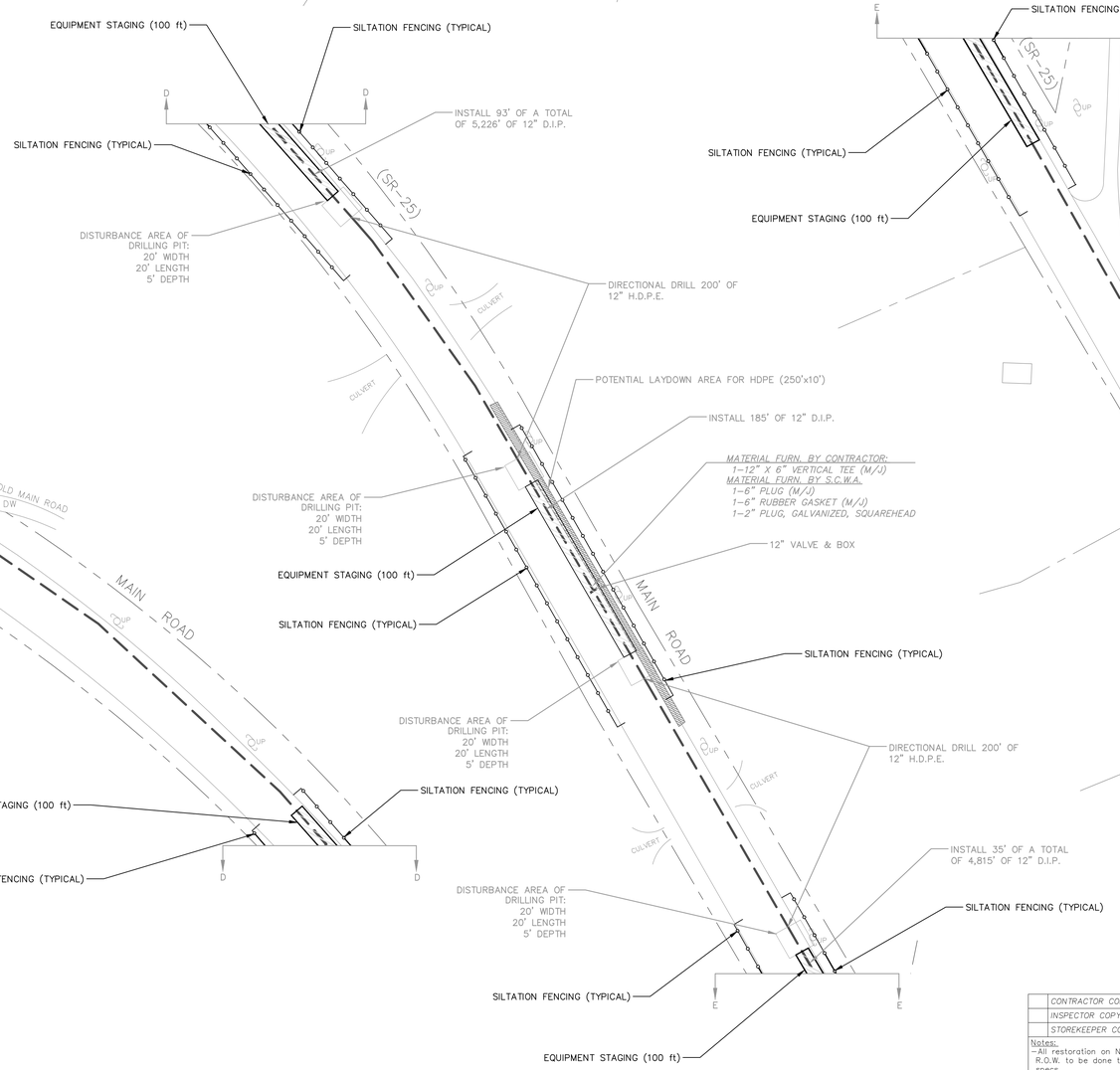
Type Of Project: WATER MAIN INSTALLATION
Dwg. No.: 7161169-(1)

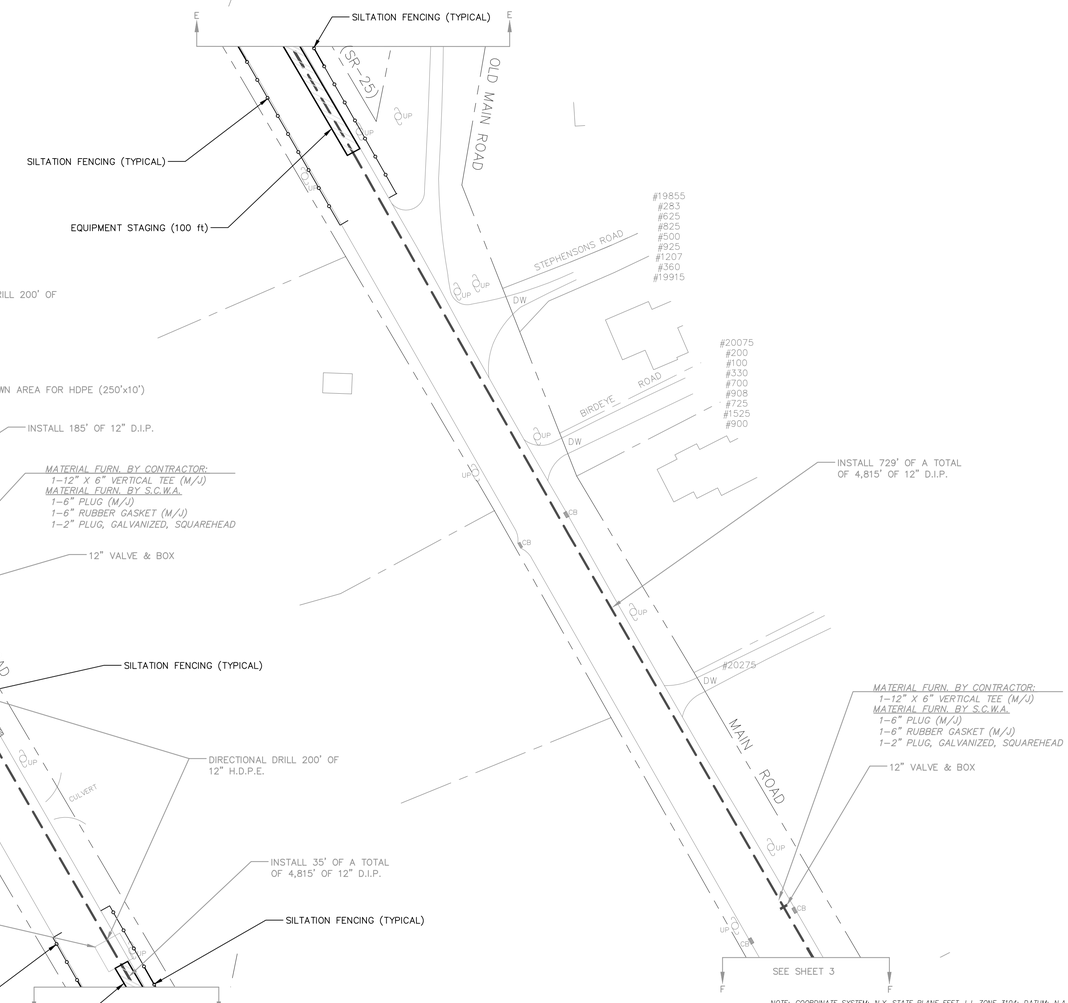
Reference Authorizations		Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 1 Of 11
		Contractor:	Map. No: 23-T	Serv.Order No:	# of Services: 258
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hydt Order No:	

Town: EAST MARION
Township: SOUTHOLD
Fire Dist: EAST MARION FD
Main Project: 7161169
Hydt Project:









NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

	CONTRACTOR COPY
	INSPECTOR COPY
	STOREKEEPER COPY

Suffolk County Water Authority

4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: **WATER MAIN INSTALLATION**

Dwg. No.: 7161169-(2)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
		Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 2 Of 11
		Contractor:	Map No: 23-T	Serv.Order No:	# of Services: 258
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: EAST MARION
Township: SOUTHOLD
Fire Dist: EAST MARION FD
Main Project: 7161169
Hyatt Project:



NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: **WATER MAIN INSTALLATION**

Dwg. No.: 7161169-(3)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
	Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24	Town: EAST MARION
	Field Prep. By:	Insp. By:	Scale: 1"=50'	Sheet 3 Of 11	Township: SOUTHOLD
	Contractor:	Map No: 23-T	Serv.Order No:	# of Services: 258	Fire Dist: EAST MARION FD
	In Service Date:		Main Order No:		Main Project: 7161169
	Compl. Dwg. By:	Date:	Hydt. Order No:		Hydt Project:

SEE SHEET 3

SEE SHEET 3

INSTALL 740' OF A TOTAL OF 1,005' OF 6" D.I.P.

INSTALL 1,050' OF A TOTAL OF 1,375' OF 12" D.I.P.

OYSTER POND LANE

VILLAGE LANE

VACANT LOT

MATERIAL FURN. BY CONTRACTOR:
1-6" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

INSTALL 794' OF 6" D.I.P.

6" VALVE & BOX

6" X 6" TEE (M/J)

6" VALVE & BOX

6" 45° BEND (M/J ANC)

MATERIAL FURN. BY CONTRACTOR:
1-12" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

6" VALVE & BOX

12" VALVE & BOX

12" X 6" TEE (M/J)

6" VALVE & BOX

6" 45° BEND (M/J ANC)

SKIPPERS LANE

INSTALL 295' OF 6" D.I.P.

HARBOR RIVER ROAD

12" VALVE & BOX

VILLAGE LANE

12" VALVE & BOX

12" X 8" TEE (M/J)

12" VALVE & BOX

12" X 8" REDUCER (M/J)

8" VALVE & BOX

ORIENT FIRE DISTRICT

INSTALL 210' OF A TOTAL OF 1,531' OF 8" D.I.P.

ORCHARD STREET

INSTALL 78' OF A TOTAL OF 750' OF 8" D.I.P.

LABOR FURN. BY SCWA CREW
INSTALL 2" BLOW-OFF AT END OF NEW WATER MAIN BY USING:
1-6" PLUG (T/J) TAPPED FOR 2"
2-NIPPLE, BRASS, 2" X 12", NL
5' OF 2" GALVANIZED PIPE
1-CAP, GALVANIZED, 2"
1-ELBOW, GALV., 2", 90 DEG
2-VALVE BOX, TOP
2-VALVE BOX, LID
3-VALVE BOX, BASE
1-CURB STOP, 2" FIP X 2" FIP DRAIN

SEE SHEET 5

SEE SHEET 6

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7161169-(4)

Notes:
-All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
-Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
		Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 4 Of 11
		Contractor:	Map No: 23-T	Serv.Order No:	# of Services: 258
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: EAST MARION
Township: SOUTHOLD
Fire Dist: EAST MARION FD
Main Project: 7161169
Hyatt Project:



NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

	CONTRACTOR COPY
	INSPECTOR COPY
	STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: **WATER MAIN INSTALLATION**
Dwg. No.: 7161169-(5)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24	Town: EAST MARION	
Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 5 Of 11	Township: SOUTHOLD	
Contractor:	Map No: 23-T	Serv.Order No:	# of Services: 258	Fire Dist: EAST MARION FD	
In Service Date:		Main Order No:		Main Project: 7161169	
Compl. Dwg. By:	Date:	Hyatt Order No:		Hyatt Project:	

N

SEE SHEET 5

SEE SHEET 4

SEE SHEET 8

SEE SHEET 7

NAVY STREET

VILLAGE LANE

FLETCHER STREET

VINCENT STREET

WILLOW STREET

WEST BAY AVENUE

KING STREET

NELSON STREET

WILLOW TERRACE LANE

LANE KING STREET

OYSTERPONDS HISTORIC SOCIETY

#375 #260 #1080 #170 #1125 #1060 #1075 #940 #975 #830 #1490 #1495 #1555 #805 #680 #1570 #1620 #1700 #1740 #1780 #1800 #1775 #1725 #1855 #1555 #230 #150 #70 #695 #595 #510 #375 #255 #355 #745 #850 #595 #700 #660 #525 #560 #425 #325 #400 #350 #220 #225 #180 #145 #230 #2595 #2655 #2660 #2760 #120 #20 #205 #85 #75 #1995 #1970 #2005 #2072 #2355 #2395 #2190 #2220 #2300 #2360 #2440

INSTALL 1,416' OF A TOTAL OF 1,488' OF 6" D.I.P.

6" 90° BEND (M/J ANC)

6" 45° BEND (M/J ANC)

MATERIAL FURN. BY CONTRACTOR:
1-6" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

6" VALVE & BOX

INSTALL 280' OF 6" D.I.P.

INSTALL 287' OF 6" D.I.P.

8" VALVE & BOX

8" X 6" TEE (M/J)

8" VALVE & BOX

6" VALVE & BOX

INSTALL 672' OF A TOTAL OF 750' OF 8" D.I.P.

MATERIAL FURN. BY CONTRACTOR:
1-8" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

#225
#170
#300
#220
#450
#650
#600
#680

8" VALVE & BOX

8" X 6" REDUCER (M/J)

6" X 6" TEE (M/J) W/ 1-6" PLUG (M/J)

6" VALVE & BOX

6" 11-1/4" BEND (M/J)

6" 11-1/4" BEND (M/J)

INSTALL 257' OF 6" D.I.P.

MATERIAL FURN. BY CONTRACTOR:
1-6" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

6" VALVE & BOX

6" VALVE & BOX

6" X 6" TEE (M/J)

6" VALVE & BOX

INSTALL 775' OF 6" D.I.P.

6" VALVE & BOX

6" X 6" TEE (M/J)

6" VALVE & BOX

MATERIAL FURN. BY CONTRACTOR:
1-6" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

6" 45° BEND (M/J ANC)

6" VALVE & BOX

6" 45° BEND (M/J ANC)

6" VALVE & BOX

6" 90° BEND (M/J ANC)

INSTALL 1,015' OF A TOTAL OF 1,210' OF 6" D.I.P.

6" VALVE & BOX

6" X 6" TEE (M/J)

6" VALVE & BOX

INSTALL 210' OF A TOTAL OF 1,534' OF 6" D.I.P.

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY	Suffolk County Water Authority				4060 Sunrise Highway Oakdale, NY 11769
INSPECTOR COPY	Type Of Project: WATER MAIN INSTALLATION				Dwg. No.: 7161169-(6)
STOREKEEPER COPY	Reference Authorizations	Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24
Notes: -All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs. -Misc. bends & offsets may be required. All fittings must use Retaining glands.		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 6 Of 11
		Contractor:	Map No: 23-T	Serv.Order No:	# of Services: 258
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: EAST MARION
Township: SOUTHOLD
Fire Dist: EAST MARION FD
Main Project: 7161169
Hyatt Project:

N

SEE SHEET 8

MAJOR POND ROAD

DW

#365

#1050

#735

#410

INSTALL 1,137' OF A TOTAL
OF 1,282' OF 6" D.I.P.

6" VALVE & BOX

#422

#600

#423

ROWE STREET

#850

6" 45° BEND (M/J ANC)

MATERIAL FURN. BY CONTRACTOR:
1-6" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

#1145

N

6" X 6" TEE (M/J)

#295

SEE SHEET 6

WILLOW TERRACE LANE

#715

6" VALVE & BOX

#270

#1345

#154

#925

INSTALL 1,324' OF A TOTAL
OF 1,534' OF 6" D.I.P.

6" X 6" TEE (M/J)
W/ 1-6" PLUG (M/J)

#590

PRIVATE ROAD

#152

6" 22 1/2° BEND (M/J)

#186

#190

#1500

6" 22 1/2° BEND (M/J)

#192

#194

#1390

6" 45° BEND (M/J ANC)

#196

#750

#1290

6" VALVE & BOX

#1060

#1170

#860

#960

INSTALL 510' OF 6" D.I.P.

LABOR FURN. BY SCWA CREW
INSTALL 2" BLOW-OFF AT END
OF NEW WATER MAIN BY USING:
1-6" PLUG (T/J) TAPPED FOR 2"
2-NIPPLE, BRASS, 2" X 12", NL
5' OF 2" GALVANIZED PIPE
1-CAP, GALVANIZED, 2"
1-ELBOW, GALV., 2", 90 DEG
2-VALVE BOX, TOP
2-VALVE BOX, LID
3-VALVE BOX, BASE
1-CURB STOP, 2" FIP X 2" FIP DRAIN

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

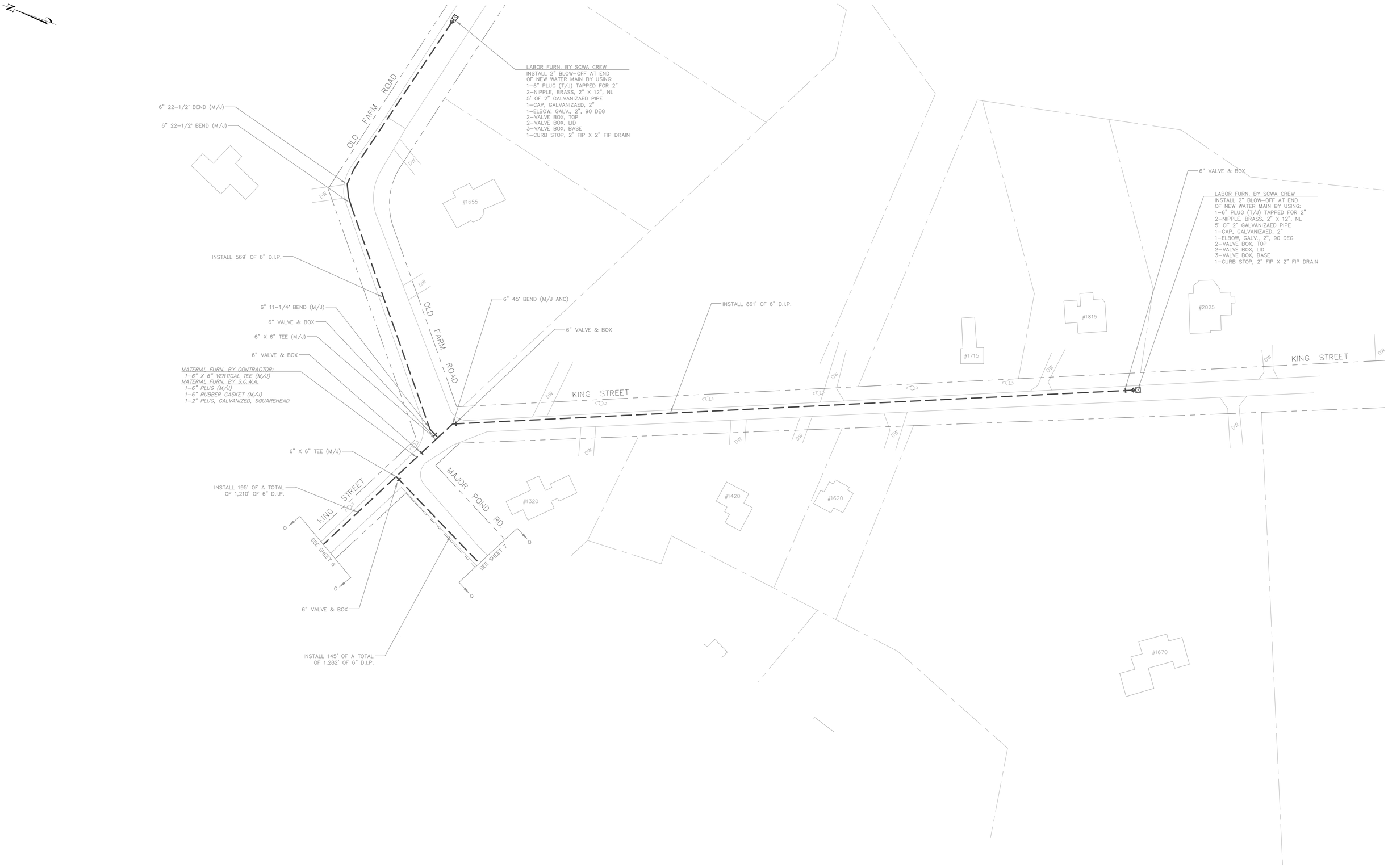
Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7161169-(7)

Notes:
-All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
-Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations					
		Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 7 Of 11
		Contractor:	Map No: 23-T	Serv.Order No:	# of Services: 258
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyat Order No:	

Town: EAST MARION
Township: SOUTHOLD
Fire Dist: EAST MARION FD
Main Project: 7161169
Hyat Project:



NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

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	INSPECTOR COPY
	STOREKEEPER COPY

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: **WATER MAIN INSTALLATION**
Dwg. No.: 7161169-(8)

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations		Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 8 Of 11
		Contractor:	Map No: 23-T	Serv.Order No:	# of Services: 258
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: EAST MARION
Township: SOUTHOLD
Fire Dist: EAST MARION FD
Main Project: 7161169
Hyatt Project:

LABOR FURN. BY SCWA CREW
INSTALL 2" BLOW-OFF AT END
OF NEW WATER MAIN BY USING:
1-12" PLUG (T/J) TAPPED FOR 2"
2-NIPPLE, BRASS, 2" X 12", NL
5' OF 2" GALVANIZED PIPE
1-CAP, GALVANIZED, 2"
1-ELBOW, GALV., 2", 90 DEG
2-VALVE BOX, TOP
2-VALVE BOX, LID
3-VALVE BOX, BASE
1-CURB STOP, 2" FIP X 2" FIP DRAIN

12" X 12" TEE (M/J)

12" VALVE & BOX

12" VALVE & BOX

DIRECTIONAL DRILL 90' OF 12" H.D.P.E.

12" X 8" REDUCER (M/J)

POTENTIAL LAYDOWN AREA FOR HDPE (100'x10')

DISTURBANCE AREA OF DRILLING PIT:
20' WIDTH
20' LENGTH
5' DEPTH

DISTURBANCE AREA OF DRILLING PIT:
20' WIDTH
20' LENGTH
5' DEPTH

POTENTIAL LAYDOWN AREA FOR HDPE (100'x10')

INSTALL 905' OF A TOTAL
OF 2,425' OF 8" D.I.P.

INSTALL 1,043' OF A TOTAL
OF 4,815' OF 12" D.I.P.

MATERIAL FURN. BY CONTRACTOR:
1-8" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

8" VALVE & BOX

MAIN ROAD

PLATT ROAD

(SR-25)

SEE SHEET 3

SEE SHEET 10

#24435 #24275 #45 #24145 #24065 #23955 #23865 #24260 #380 #23765 #620 #23780 #140 #23650 #23600 #23530 #24190 #23300

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Type Of Project

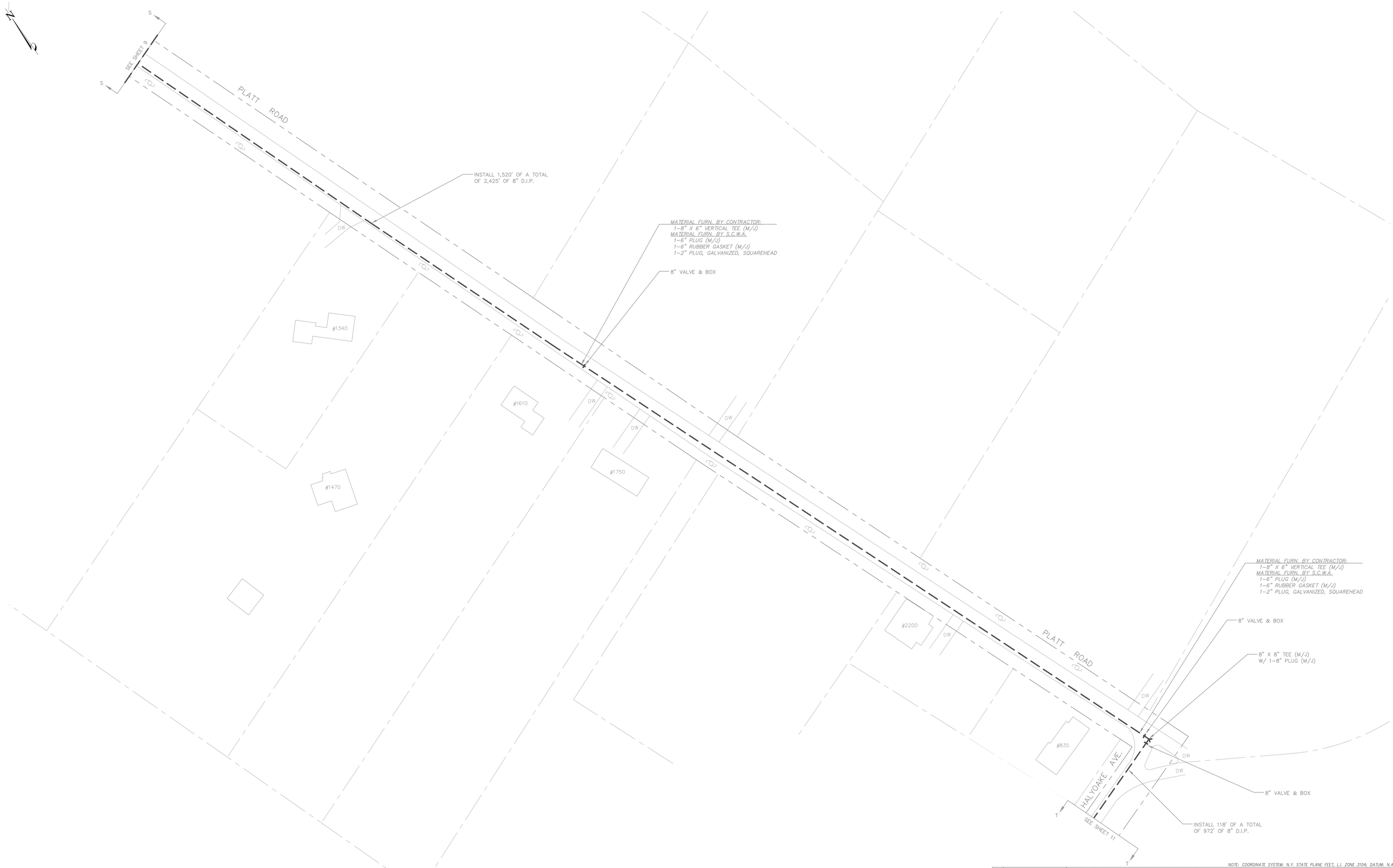
Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

WATER MAIN INSTALLATION

Dwg. No.: 7161169-(9)

Notes:
-All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
-Misc. bends & offsets may be required. All fittings must use Retaining glands.

Reference Authorizations						
		Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24	Town: EAST MARION
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 9 Of 11	Township: SOUTHOLD
		Contractor:	Map No: 23-T	Serv.Order No:	# of Services: 258	Fire Dist: EAST MARION FD
		In Service Date:		Main Order No:		Main Project: 7161169
		Compl. Dwg. By:	Date:	Hydt. Order No:		Hydt. Project:



NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

	CONTRACTOR COPY
	INSPECTOR COPY
	STOREKEEPER COPY

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Suffolk County Water Authority

4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7161169-(10)

Reference Authorizations		Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 10 Of 11
		Contractor:	Map. No: 23-T	Serv.Order No:	# of Services: 258
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: EAST MARION
Township: SOUTHOLD
Fire Dist: EAST MARION FD
Main Project: 7161169
Hyatt Project:

N

HALYOAKE AVE.

SEE SHEET 10

T

T

#605

#405

INSTALL 854' OF A TOTAL OF 972' OF 8" D.I.P.

DW

DW

DW

DW

8" 22 1/2' BEND (M/J)

MATERIAL FURN. BY CONTRACTOR:
1-8" X 6" VERTICAL TEE (M/J)
MATERIAL FURN. BY S.C.W.A.
1-6" PLUG (M/J)
1-6" RUBBER GASKET (M/J)
1-2" PLUG, GALVANIZED, SQUAREHEAD

8" VALVE & BOX

TO OLD FARM RD

HALYOAKE AVE.

#3585

#4065

6" 22 1/2' BEND (M/J)

6" 22 1/2' BEND (M/J)

ORCHARD STREET

INSTALL 1025' OF 6" D.I.P.

6" VALVE & BOX

8" X 6" REDUCER (M/J)

8" X 8" TEE (M/J)
W/1-8" PLUG (M/J)

#3480

#3630

#3780

#3940

#4090

#4250

ORCHARD STREET

6" VALVE & BOX

LABOR FURN. BY SCWA CREW
INSTALL 2" BLOW-OFF AT END
OF NEW WATER MAIN BY USING:
1-6"" PLUG (T/J) TAPPED FOR 2"
2-NIPPLE, BRASS, 2" X 12", NL
5' OF 2" GALVANIZED PIPE
1-CAP, GALVANIZED, 2"
1-ELBOW, GALV., 2", 90 DEG
2-VALVE BOX, TOP
2-VALVE BOX, LID
3-VALVE BOX, BASE
1-CURB STOP, 2" FIP X 2" FIP DRAIN

NOTE: COORDINATE SYSTEM: N.Y. STATE PLANE FEET, L.I. ZONE 3104; DATUM: N.A.D.1983

CONTRACTOR COPY
INSPECTOR COPY
STOREKEEPER COPY

Notes:
- All restoration on N.Y.S. R.O.W. to be done to N.Y.S. specs.
- Misc. bends & offsets may be required. All fittings must use Retaining glands.

Suffolk County Water Authority
4060 Sunrise Highway
Oakdale, NY 11769

Type Of Project: WATER MAIN INSTALLATION

Dwg. No.: 7161169-(11)

Reference Authorizations					
		Fld. Sketch By: CM	Date: 2/21/24	Drawn By: TD	Date: 3/1/24
		Field Prep By:	Insp. By:	Scale: 1"=50'	Sheet 11 Of 11
		Contractor:	Map. No: 23-T	Serv.Order No:	# of Services: 258
		In Service Date:		Main Order No:	
		Compl. Dwg. By:	Date:	Hyatt Order No:	

Town: EAST MARION
Township: SOUTHOLD
Fire Dist: EAST MARION FD
Main Project: 7161169
Hyatt Project:

NYSDOT NOTES

a. Before construction, the contractor shall coordinate with State Permit Engineer regarding appropriate location for snow stakes sleeves.

b. After construction, sidewalks and ramps must be evaluated for compliance with current ADA standards. The permittee or his designated "designer of record" shall field verify that the pedestrian features (ramps, sidewalk, etc.) were constructed to current ADA standards outlined in NYSDOT Specs Section 608 and related Standard Sheets. Submit required documentation to the State Permit Engineer before the work can be accepted as complete and the permit be closed. The features that do not comply with ADA requirements upon completion will require removal and reconstruction.

c. The contractor shall clean existing drainage basins along and immediately adjacent to the NY site frontage during and after construction as ordered by the State Engineer.

d. Repair existing shoulder, sidewalk and curbing as ordered by the State Engineer.

e. Any sidewalk panels or connecting pavement that have settled with a greater than ¼" lip or crack over ½" wide shall be replaced to meet ADA requirements.

f. Running slope of the driveway within the ROW shall not exceed 6%.

g. Construction materials and equipment should be removed from the NYSDOT ROW at the end of each workday. Materials allowed to remain on-site must be stored outside the vehicle clear zone.

h. Removal of the existing concrete curb should be done from the back side to minimize any damage to the existing pavement. This involves pulling the curb out from the back and pouring new curb up against the existing pavement.

i. All new or relocated signposts must be breakaway type and installed in PVC sleeves.

j. Snow storage strip and sidewalk restoration must match or enhance the aesthetic value of the similar features in the neighborhood.

k. Pavement restoration shall be in kind. Composite pavement restoration shall be taken to existing longitudinal joint. . If any damage occurs to the concrete panel, the contractor shall replace the existing concrete pavement per the current NYSDOT HES Concrete Pavement Repair Details.

l. Composite Pavement Restoration should refer and follow NYSDOT Region 10 Pavement Repair Details (DWG No.'s PR-2A to PR-10).

m. Minimum width of asphalt restoration should be 4' for proper compaction. Add 1' overcut for top course.

n. All cold joints to be sealed with hot applied sealant.

o. Tack coat is required between all lifts and joints, regardless of when placed.

p. The thickness of curb ramps should be a minimum 6" and they should include wire fabric reinforcement with 3" of top cover.

q. The ramps shall have a level 5'x5' landing in the sidewalk.

r. The curb ramps shall be oriented to direct the pedestrians straight to the destination ramp across the driveway/street.

s. Erosion and Sediment control details shall follow Standard Sheets 209.

t. All driveways and side roads impacted by the Work Zone Traffic scheme shall be kept open and accessible all the time.

u. Scaffolding must be installed in a way that will provide minimum 8' wide, ADA compliant clear passage all the time.

v. All audible pedestrian signal pushbuttons shall be programmed with custom voice and the contractor shall supply the programming wave file to the state for future use.

w. When pavement with inductance loops is disturbed/resurfaced, re-install the loops prior to the installation of asphalt top course

x. Minimum width of crosswalk is 8'. Any street (or parking lot entrance) wider than 40' measured at the center of the crosswalk shall use a staggered type crosswalk and not the parallel type.

y. Water quality structures (installed upstream of each of the leaching chamber cluster) must be cleaned twice a year (spring and fall).

z. If temporary chain link fence is used, it must not intrude upon the public ROW and must not interfere with the required 5' pedestrian path.

aa. Horizontal directional drilling shall meet the requirements of NYSDOT Specs Section 650.

bb. NYSDOT General Roadside Seed Mix shall be used for all grass restoration.

cc. Approved items can be verified at www.dot.ny.gov/PIC. Standard Sheets are available at; Standard Sheets (US Customary) (ny.gov). For more info, please go to www.dot.ny.gov/permits.

dd. Any utility work proposed in State Highway ROW will require separate application and submission of restoration plans. Follow the guidelines of our utility handbook, Blue Book titled, 'Requirements for The Design and Construction of Underground Utility Installations Within the State Highway Right-Of-Way'.
The applicant should contact NYSDOT HWP Team for further directions regarding Utility Highway Work Permit (HWP) applications. The ***utility HWP issuance is subject to issuance of the HWP required for site work***.

ee. All proposed road improvements detailed in the Site Plans must comply with the latest versions of American Association of State Highway & Transportation Officials (AASHTO), ADA, National Manual of Uniform Traffic Control Design (MUTCD) with the NYS Supplement , NYSDOT Highway Design Manual, and the Policy and Standards for The Design of Entrances to State Highways ('Driveway Design Policy'). Road improvement plans must provide all appropriate NYSDOT Standard Details and NYSDOT Standard Item Numbers.

ff. Before construction can commence, the permit engineer, needs to be notified and a pre-construction meeting will need to be set up.

11.5.2 Epoxy Pavement Markings (Epoxy Paint)
Epoxy is a durable pavement marking and the primary longline material used by NYSDOT. In addition to being used for center lines, lane lines, and edge lines, epoxy is used for symbols, characters, and special stripes

11.5.2.1 Material Requirements. Epoxy paint material and application requirements are covered under NYSDOT Standard Specification 685 Reflectorized Pavement Markings. Applications of epoxy markings with specialty reflective beads and placements in a groove are covered in various special specifications. Refer to section 11.5.5 Grooved-In Wet-Night Pavement Markings for more information.

Epoxy with standard size reflective glass spheres may be used as intersection markings, where cool weather installation is expected, or where performance problems with preformed tape makes epoxy a more suitable choice. Epoxy with wet-night visibility spheres should not be used for intersection markings. If epoxy is used for high-visibility ladder bar crosswalks, the standard crosswalk design should be modified so that the epoxy ladder bars are only 12 inches wide and are not placed in the wheel paths.

11.5.2.2 Cost and Service Life. The expected service life is 2 years on asphalt and concrete pavements.

11.5.2.3 Pavement Compatibility. Epoxy is compatible with new and aged conventional asphalt and concrete pavements. It is also compatible with many other asphalt, concrete, and polymer specialty surface treatments.

Refer to Appendix 11-A for more information on epoxy pavement compatibility.

11.5.2.4 Pavement Marking Compatibility. Epoxy is compatible with existing epoxy, waterborne traffic paint, and thermoplastic pavement markings as per the Pavement Marking Compatibility Chart Appendix 11-A. Epoxy is not compatible with preformed tape and will lose its bond to this surface prematurely.
Refer to Appendix 11-B for appropriate pavement marking items.

11.5.3 Extruded Thermoplastic Reflectorized Pavement Markings
Thermoplastic is used as an alternative to epoxy on new asphalt pavement for longline pavement markings, special markings and special stripes. It is possible to apply thermoplastic with portable equipment for special markings and stripes. Thermoplastic does not adhere well to concrete and is not recommended for concrete surfaces.

Thermoplastic is more susceptible to traffic and snowplow damage due to its application thickness. It is more sensitive to adverse weather conditions (temperature and moisture) at the time of installation, and it cannot be used to restripe over existing markings. For these reasons, epoxy is preferred over thermoplastic for longline and hatch line pavement markings.

Table 1 - Traffic Paint Summary

Recommended Use	**Longline**
Recommended Traffic Volume	**<5000 AADT1**
Service Life 2 (Yrs.)	**1.0**
Application Conditions	**Air and Pavement: 50°F and Rising**
	(Not damp)
Recommended Thickness (Wet-Mil)	
-existing markings	15 mils
-bare Asphalt and PCC	20 mils
-open graded or paver placed	**30 mils (or apply 2 layers at 15 or 20 mils each)**

1.Other applications are appropriate as indicated above. Designers should refer to the regional list of highways that qualify for durable pavement markings.

2. May be reduced for some applications.

Table 2 - Epoxy Application Summary

Recommended Use	Longline, Intersections1, Hatch
Recommended Traffic Volume	All
Service Life (Yrs.) 2	
-Asphalt	2
-PCC	2
Application Conditions	Air and Pavement ≥ 45 °F and Rising
	(Not Damp)
Thickness (Wet-Mil)	
- existing markings	15 mils
-bare Asphalt and PCC	20 mils

1. For frictional considerations at intersections, use standard size (or Type II) reflective spheres only, minimize width of transverse boundary lines (12 inches, max), and avoid placing ladder bars in the wheel paths.

2. May be reduced for some applications.

Special Note - Optional Use of Warm Mix Asphalt (WMA) Technologies
The contractor has the option of using an Approved WMA Technology in the production of all *402, Hot Mix Asphalt (HMA)* items, except *SUPERPAVE HMA with Ice Retardant* items, *Waterproofing Bridge Deck HMA* items, *and Paver-Placed Surface Treatment* items, at no additional cost to the State.
If the contractor chooses to use a WMA technology, the provisions of §401 and §402 shall apply including the following:

1.Use an approved technology appearing on the Approved List for *Technologies for Warm Mix Asphalt*. Design amixture using a WMA Technology in accordance with MM 5.16, *Superpave Hot Mix Asphalt Mixture Design andMixture Verification Procedure.* At a minimum, a one-point verification of the mixture's volumetric properties isacceptable for the following situations:

- •When the WMA mix design is based on an existing Production Status HMA mix design.
- •When the WMA mix design is based on, and utilizes a different WMA technology than, an existingProduction Status WMA mix design.

2.Comply with the latest manufacturer's "Production, Testing, and Compaction Details" from the Approved List forincorporating the WMA technology. Test specimens may be made from plant produced or laboratory preparedWMA. Test specimens must be made from plant produced WMA if adding the WMA technology in the lab does notsimulate the production process. The Regional Materials Engineer (RME) may require a State representative bepresent during the fabrication and testing. Submit the WMA design to the RME for review and verification at least14 calendar days before production, including:

- •Name of WMA technology and the target dosage rate.
- •If using an additive other than water,
- -Submit a MSDS for the additive.
- -Submit either enough of the additive for the laboratory mix design verification, or the additive pre-blended in the PG Binder at the correct dosage. If the additive is not pre-blended into the PGBinder, include directions for properly incorporating the additive into the laboratory made mixture.

- •Prior to the submission of any mix design, contact the RME to determine if there is an increasedconcern regarding the mixture's moisture susceptibility based on the WMA technology and/or the typeof aggregate being used, or the performance of similar mixes. The RME may require AASHTO T 283moisture susceptibility test results, meeting a minimum Tensile Strength Ration (TSR) of 80%, as partof the mix design submission.

3.Submit Production Quality Control Plan revisions incorporating the WMA technology if not previously submitted.

4.For 80 Series Compaction Method, complete all breakdown roller passes before the mat temperature falls below230° F, unless approved by the Director, Materials Bureau.

5.When the asphalt mixture is being placed over a Sheet-Applied Waterproofing Membrane, maintain a minimumdelivery temperature in accordance with the Material Detail Sheets prepared by the membrane manufacturer.

This permit may require major earthwork testing which includes compaction and gradation testing. Required testing frequency for compaction testing is one per day, while frequency for gradation testing is one per 500 cubic yards. Further information can be found in the MURK 1B Construction Inspection Manual section 203 Excavation and Embankment. The consultant inspector must possess a current earthwork inspection certification from either NYSDOT Earthwork Inspector School or NETTCP Soils and Aggregate Inspector Certification.

UTILITY ISOLATION AND JOINT LAYOUT GENERAL NOTES:

1. JOINT LAYOUT METHODOLOGY

   A. LOCATE LONGITUDINAL JOINTS.

   B. IN ORDER OF PREFERENCE, CONSTRUCT LONGITUDINAL JOINTS SUCH THAT:

      1. JOINTS ARE ALIGNED WITH PAVEMENT MARKINGS.
      2. JOINTS ARE PLACED DOWN THE CENTER OF THE LANE, CENTERED BETWEEN VEHICLE WHEEL PATHS.

   C. LOCATE UTILITIES AND DRAINAGE STRUCTURES, WHENEVER POSSIBLE, POSITION UTILITIES AND DRAINAGE STRUCTURES (OTHER THAN CATCH BASINS) SUCH THAT:

      1. THE STRUCTURES ARE BETWEEN WHEEL PATHS, AND
      2. THE STRUCTURES ARE LONGITUDINALLY SPACED TO ALLOW OPTIMAL ISOLATION TECHNIQUES (REFER TO STANDARD SHEET 502-13, DETAILS A, C, D, AND F).

   D. SELECT A TELESCOPING CASTING OR THE MOST APPROPRIATE ISOLATION TECHNIQUE FOR EACH UTILITY, DRAINAGE STRUCTURE, AND/OR GROUP THEREOF AS DESCRIBED IN NOTE 5 AND THE 'TYPICAL UTILITY ISOLATION GUIDELINES' TABLE ON STANDARD SHEET 502-08.

   E. LOCATE THE TRANSVERSE JOINTS AND UNTIED LONGITUDINAL (SHEAR KEY) JOINTS NEAR UTILITIES AND DRAINAGE STRUCTURES.

   F. EQUALLY SPACE REMAINING TRANSVERSE JOINTS BETWEEN THOSE TRANSVERSE JOINTS PLACED IN CONJUNCTION WITH UTILITIES AND DRAINAGE STRUCTURES SUCH THAT THE DESIGN SLAB LENGTH IS ACHIEVED.

   DESIGN AND LAYOUT THE LONGITUDINAL JOINT TIES AND TRANSVERSE JOINT SUPPORTS.

2. PCC SLAB ASPECT RATIO AND SLAB GEOMETRY

   A. THE ASPECT RATIO (W/L) IS THE RATIO OF SLAB WIDTH (W) TO SLAB LENGTH (L). FOR SLABS ROUTINELY EXPOSED TO TRAFFIC, DETERMINE THE MINIMUM AND MAXIMUM PCC PANEL LENGTHS AS PER 502-02 TABLE 2 AND CONSTRUCT SLABS MEETING THE FOLLOWING GEOMETRIC CRITERIA:

      1. $0.65 \leq W/L \leq 1.37$

   B. TYPICAL TRAVEL LANES FOR DOWELED PAVEMENTS WITHOUT UTILITIES HAVE SLAB LENGTHS AND WIDTHS APPROACHING THE MAXIMUM VALUES SHOWN IN TABLE 2 ON STANDARD SHEET 502-2. THIS RESULTS IN ASPECT RATIOS FOR SLABS WITHOUT UTILITIES APPROACHING MINIMUM VALUES. FOR SLABS WITH SINGLE UTILITIES OR DRAINAGE STRUCTURES, THE ASPECT RATIO APPROACHES MAXIMUM VALUES BECAUSE THESE SLABS HAVE REDUCED LENGTHS (REFER TO STANDARD SHEETS 502-09 THROUGH 502-13). THE GEOMETRIC CRITERIA IN NOTE 2A DO NOT APPLY TO HEAVILY REINFORCED SLABS DEPICTED ON STANDARD SHEET 502-14 OR TO CATCH BASIN ISOLATION SLABS DEPICTED ON STANDARD SHEETS 502-12 AND 502-13.

   C. IF PROJECT CONSTRAINTS RESULT IN NARROWER TRAVEL LANES OR REDUCED SLAB LENGTHS FROM THOSE DEPICTED ON STANDARD SHEET 502-02, THE ASPECT RATIO REQUIREMENTS OF NOTE 2A MUST BE SATISFIED.

3. TRANSVERSE JOINT TYPE SELECTION

   A. THERE ARE THREE BASIC TYPES OF TRANSVERSE JOINTS: CONTRACTION, CONSTRUCTION, AND EXPANSION. THESE JOINTS CONTROL CRACKING, ACCOMMODATE SLAB MOVEMENT, AND PROVIDE LOAD TRANSFER. IT IS ESSENTIAL TO PROPERLY COAT AND ALIGN DOWELS TO ALLOW FREE SLAB MOVEMENT. SEE STANDARD SHEETS 502-05 AND 502-06 FOR TRANSVERSE JOINT DETAILS.

   B. GENERALLY, TRANSVERSE JOINTS EXTEND ACROSS THE FULL PAVEMENT WIDTH AND ARE ALIGNED PERPENDICULAR TO THE LONGITUDINAL JOINT. TRANSVERSE JOINT TYPE, LOCATION, AND/OR ALIGNMENT MAY CHANGE WHEN A TRANSVERSE JOINT INTERSECTS AN UNTIED LONGITUDINAL (SHEAR KEY) JOINT.

   C. CONTRACTION JOINTS ARE BY FAR THE MOST COMMON TYPE OF TRANSVERSE JOINT. SPACE CONTRACTION JOINTS TO ACHIEVE 12'-0" TO 15'-0" SLAB LENGTHS.

   D. CONSTRUCTION JOINTS ARE USED AT PAVING INTERRUPTIONS. THEY ARE AS WIDE AS THE CONCRETE PLACEMENT, TYPICALLY ONE OR TWO LANES, NOT NECESSARILY FULL WIDTH. ALIGN CONSTRUCTION JOINTS WITH ADJACENT TRANSVERSE JOINTS.

   E. EXPANSION JOINTS SHOULD BE USED SPARINGLY. THEY ISOLATE AND PROTECT PAVEMENTS AND STRUCTURES FROM CONCRETE MOVEMENT AND VOLUME CHANGES. EXPANSION JOINTS ARE REQUIRED AT INTERSECTIONS AND ISOLATED UTILITIES EXPOSED TO TRAFFIC.

   F. ISOLATION JOINTS ARE NOT CAPABLE OF TRANSFERRING LOADS BECAUSE THEY DO NOT CONTAIN LOAD TRANSFER DEVICES. THEREFORE, THEY ARE ONLY USED TO ISOLATE UTILITIES AND DRAINAGE STRUCTURES IN AREAS NOT ROUTINELY EXPOSED TO TRAFFIC.

4. UTILITY AND DRAINAGE STRUCTURE ISOLATION

   A. FOLLOW THE 'TYPICAL UTILITY ISOLATION GUIDELINES' TABLE ON STANDARD SHEET 502-08 TO SELECT THE APPROPRIATE ISOLATION METHOD.

   B. WHEREVER POSSIBLE, USE TELESCOPING MANHOLE CASTINGS TO INTEGRALLY CAST THE UTILITIES INTO THE PCC SLAB. REFER TO CONDITIONS (A), (B), (K), AND (L) ON STANDARD SHEET 502-08.

   C. IF A TELESCOPING CASTING CAN NOT BE USED (SEE STANDARD SHEET 502-09, NOTE 2), USE A NON -TELESCOPING CASTING OR A SHALLOW UTILITY ISOLATION. REFER TO CONDITIONS (C), (E), (F), (H), AND (J) ON STANDARD SHEET 502-08.

   D. IF THE MASONRY PORTION OF SHALLOW UTILITIES OR UTILITIES WITH NON -TELESCOPING CASTINGS FALLS WITHIN 1'-0" OF THE PROJECTED LONGITUDINAL JOINT, OFFSET THE LONGITUDINAL JOINT SUCH THAT A 1'-0" CLEARANCE IS ACHIEVED BETWEEN THE MASONRY AND THE LONGITUDINAL JOINT. THE WIDENED SLAB CONTAINING THE STRUCTURE AND THE NARROWED ADJACENT SLAB MUST BOTH MEET THE GEOMETRIC REQUIREMENTS IN NOTE 2A. IF THESE REQUIREMENTS CAN NOT BE MET, OMIT THE OFFSET LONGITUDINAL JOINT AND ISOLATE THE STRUCTURE IN A SINGLE PLACEMENT THAT IS TWO SLABS WIDE. THIS PLACEMENT MUST ALSO MEET THE GEOMETRIC REQUIREMENTS IN NOTE 2A. REFER TO CONDITIONS (D) AND (G) ON STANDARD SHEET 502-08.

   E. WHEN MULTIPLE UTILITIES ARE LOCATED SUCH THAT INDIVIDUAL ISOLATION IS NOT POSSIBLE, ISOLATE THE ENTIRE GROUP OF UTILITIES IN A HEAVILY REINFORCED SLAB. REFER TO CONDITIONS (M) AND (N) ON STANDARD SHEET 502-08.

   F. WHEN UTILITIES AND/OR DRAINAGE STRUCTURES IN ADJACENT LANES PRECLUDE AN OPTIMAL SOLUTION FOR EACH STRUCTURE, THE ISOLATION METHODS SHALL BE PRIORITIZED AS FOLLOWS:

      1. STRUCTURES IN THE TRAVEL LANE CARRYING THE GREATEST NUMBER OF TRUCKS
      2. STRUCTURES IN OTHER TRAVEL LANES
      3. STRUCTURES IN PARKING LANES, SHOULDERS, CORE AREAS, AND OTHER NON-TRAVELED AREAS

5. CONSTRUCTION SEQUENCE AT ISOLATED UTILITIES AND DRAINAGE STRUCTURES

   A. FORM ISOLATION JOINT.

   B. CONSTRUCT THE PAVEMENT OUTSIDE THE ISOLATION JOINT.

   C. SAWCUT TRANSVERSE AND LONGITUDINAL JOINTS, FIRST STAGE.

   D. REMOVE ISOLATION FORM AND TEMPORARY SUPPORT.

   E. SAWCUT TRANSVERSE AND LONGITUDINAL JOINTS, SECOND STAGE.

   F. PLACE REMOLDED RESILIENT JOINT FILLER AROUND THE INNER PERIPHERY OF THE ISOLATION.

   G. PLACE CONCRETE WITH REINFORCEMENT INSIDE THE ISOLATION.

   H. SAWCUT AND SEAL THE ISOLATION JOINT.

   I. SEAL TRANSVERSE AND LONGITUDINAL JOINTS.

   NOTE: STEPS (C.) AND (D.) ABOVE MAY BE REVERSED

LEGEND FOR PLAN VIEW DETAILS STANDARD SHEETS 502-08 THROUGH 502-14

FEATURE	SYMBOL
TRANSVERSE CONTRACTION JOINT	
TRANSVERSE EXPANSION JOINT	E
TRANSVERSE ISOLATION JOINT	I
TIED LONGITUDINAL JOINT	L
UNTIED LONGITUDINAL JOINT (SHEAR KEY)	S
NON-TELESCOPING MANHOLE CASTING	M.H.
TELESCOPING MANHOLE CASTING	M.H.
SHALLOW UTILITY (TOP OF STRUCTURE IS IN PCC PAVEMENT)	M.H. OR M.H.
DRAINAGE STRUCTURE ISOLATION (NOT EXPOSED TO TRAFFIC)	S
DRAINAGE STRUCTURE ISOLATION (EXPOSED TO TRAFFIC)	S
WIRE MESH REINFORCED SLAB	
HEAVILY REINFORCED SLAB	
LONGITUDINAL JOINT TIE OR DEFORMED REINFORCING BAR	
TRANSVERSE JOINT DOWEL BAR	

JOINT DETAIL REFERENCE

FEATURE	FOR DETAIL SEE STANDARD SHEET
TRANSVERSE CONTRACTION JOINT	502-05, DETAIL "A"
TRANSVERSE EXPANSION JOINT	502-05, DETAIL "B"
TRANSVERSE ISOLATION JOINT	502-05, DETAIL "C"
TIED LONGITUDINAL JOINT	502-03, DETAILS "A", "B", AND "C"
UNTIED LONGITUDINAL JOINT (SHEAR KEY)	502-03, DETAILS "D" AND "E"

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

UTILITY ISOLATION AND JOINT LAYOUT GENERAL NOTES

APPROVED JANUARY 8, 2024
DEPUTY CHIEF ENGINEER (TECHNICAL SERVICES)

ISSUED UNDER EI 24-001

502-07

1. Turf Establishment Roadside. Areas indicated in the contract documents for Turf Establishment Roadside or other payment items as indicated in the contract documents – will be accepted for final payment when the specified, established, permanent turf grass species are:
a. not thinly or sparsely established, resulting in bare ground greater than one foot in diameter.
b. at a uniform density and cover a minimum of eighty percent (80%) of the ground surface.
c. able to have one mowing cycle in accordance with §610–3.12 A., unless conditions prevent
d. exhibiting a heathy green color.

2. Turf Establishment Lawns. Areas indicated in the contract documents for Turf Establishment Lawns or other payment items as indicated in the contract documents – will be accepted for final payment when the specified, established, permanent turf grass species are:
a.
diameter.
b. at a uniform density and cover a minimum of ninety percent (90%) of the ground surface.
c. able to have one mowing cycle in accordance with §610–3.12 B., unless conditions prevent
d. exhibiting a heathy green color.

3. Turf Establishment Mowing Not Included. Areas indicated in the contract documents for turf establishment payment item where mowing is either not possible or not desired will be accepted for final payment when the specified, established, permanent turf grass species are:
a. not thinly or sparsely established, resulting in bare ground greater than one foot in diameter.
b. at a uniform density and cover a minimum of eighty percent (80%) of the ground surface.
c.
d. exhibit a heathy green color.

4. Turf Establishment Permit Requirements. Areas indicated in the contract documents for turf establishment payment items associated with permits containing establishment criteria will be accepted for final payment when the specified, established, permanent turf grass species are:
a. not thinly or sparsely established, resulting in bare ground greater than one foot in diameter.
b. at a uniform density and cover a minimum of eighty percent (80%) of the ground surface, or compliant with permit requirements.
c. compliant with permit requirements as indicated in the contract documents.
d. determined to be healthy (visual inspection) as indicated by color and vigorous growth.

5. Turf Establishment – Restoration/High Traffic, and Salt Tolerant turf establishment item numbers shall use the Turf Establishment Roadside establishment criteria, UNLESS otherwise specified in the contract documents.

6. Nurse crops No acceptance criteria.

7. Temporary/Cover Crops – Refer to §209–3.03 for the acceptance criteria for temporary/cover
crops.

Payment Item

610.1601 Turf Establishment Roadside

610.1602 Turf Establishment Lawns

610.1603 Turf Establishment – Restoration/High Traffic Seed Mix

610.1604 Turf Establishment Salt Tolerant Seed Mix

610.1605 Turf Establishment Performance.

610.1401 Topsoil Reused on Site Materials

610.1402 Topsoil Roadside

610.1403 Topsoil Lawns

610–3.04 Wildflower Seeding. The Contractor shall clean all equipment involved in wildflower seeding to remove plants, seeds and propagules prior to commencement of work at no additional cost to the State.

The Contractor shall install wildflower seeding materials in accordance with the contract documents. Any method of sowing that does not injure the seeds and provides soil contact in the process of spreading
rate.

The Contractor shall perform the initial watering and spread straw or mulch Types I V as specified in the contract documents, uniformly at a rate consistent with seed supplier recommendations. Mulch anchorage is required unless otherwise specified in the contract documents. Wildflower seeding areas will be accepted after the seeding operation is complete. Any work required to correct initial seeding (installation) shall be done at no additional cost to the State.

The Contractor shall water the wildflower seeding areas for the duration of the contract. Watering to care for the wildflower seeding areas will be paid for separately.

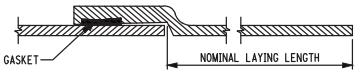
610–3.05 Sod. The Contractor shall generally place sod during the seasons identified in Table 610–1 Sodding Seasons. The Contractor may request extension of seasons, provided the other conditions are met.

TABLE 610–1 SODDING SEASONS		
Geographic locations Spring Fall	SPRING	FALL
R1–Essex, Warren (north of towns of Bolton & Warrensburg), R2–Hamilton, Herkimer (towns of Ohio and Webb) R7–Lewis, St. Lawrence, Franklin, Clinton, Jefferson (east of Rte 81)	4/15–6/30	8/15–10/15
R1 Greene, Rensselaer, Schenectady, Saratoga, Washington, Albany, Warren (towns of Bolton & Warrensburg & south) R2– Montgomery, Fulton, Oneida, Madison, Herkimer (south of town of Ohio) R3,6,9 All counties	4/1–6/15	8/15–10/31

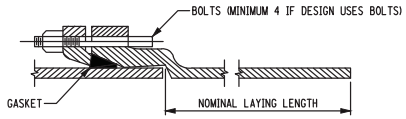
Between the Friday before Memorial Day and Labor Day, no daytime lane closures are allowed, and no nighttime lane closures are allowed before 10 pm.

Between the Friday before Memorial Day and Labor Day, no lane closures are allowed on Fridays after 1 pm in the eastbound direction; and no lane closures are allowed on Sunday nights in the westbound direction.

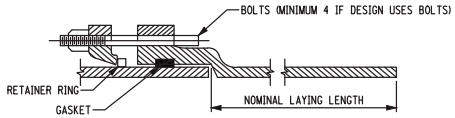
TURF ESTABLISHMENT DETAILS
NEW YORK STATE DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS (USC) SEPTEMBER 1, 2024
SECTION 600, VOLUME 3
610–3.03 & 610–3.04



PUSH-ON JOINT FOR
DUCTILE IRON PIPE AND FITTINGS
NOTE: WILL VARY WITH SIZE AND MANUFACTURER

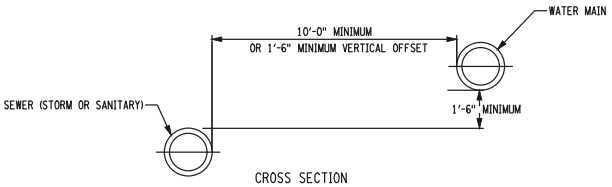


MECHANICAL JOINT (NON-RESTRAINED) FOR
DUCTILE IRON PIPE AND FITTINGS
NOTE: WILL VARY WITH SIZE AND MANUFACTURER

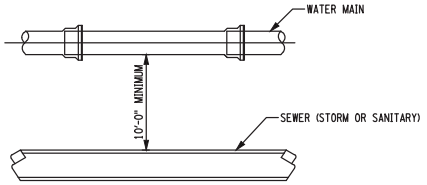


RESTRAINED MECHANICAL JOINT FOR
DUCTILE IRON PIPE AND FITTINGS
NOTE: WILL VARY WITH SIZE AND MANUFACTURER

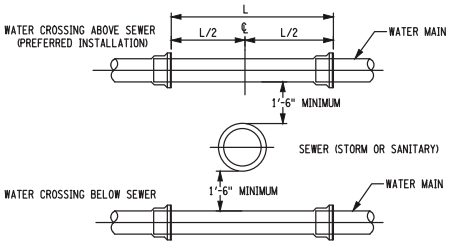
MECHANICAL JOINT BOLT TORQUE		
NPS SIZE	BOLT SIZE	TORQUE (LBF/FT)
3	5/8"	45-60
4-24	3/4"	75-90
30-36	1"	100-120
42-48	1 1/4"	120-150



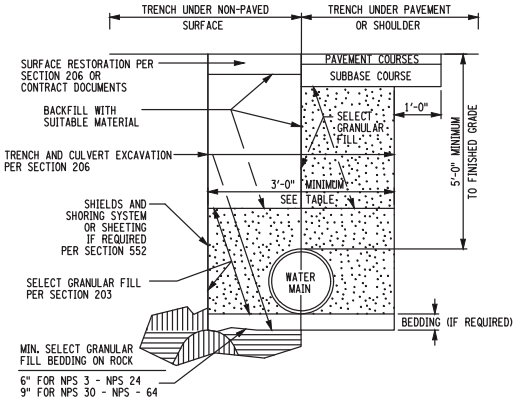
CROSS SECTION



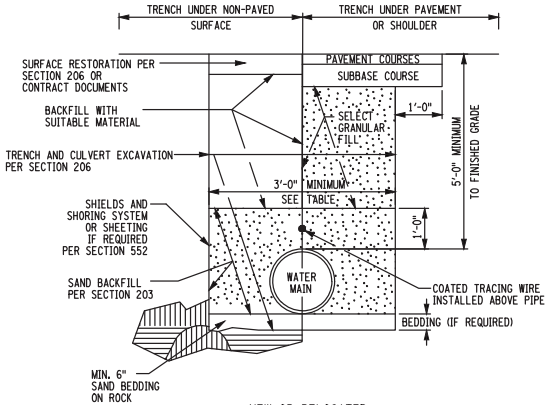
PLAN
WATER MAIN/SEWER
PARALLEL INSTALLATION



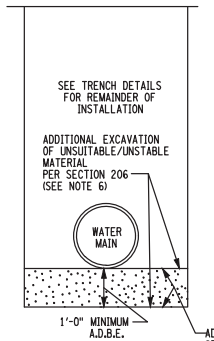
ELEVATION
WATER MAIN/SEWER
CROSSING



NEW OR RELOCATED
DUCTILE IRON OR STEEL WATER MAIN
TRENCH DETAIL



NEW OR RELOCATED
PLASTIC WATER MAIN
TRENCH DETAIL



WATER MAIN INSTALLATION IN
UNSTABLE OR UNSUITABLE SOIL CONDITIONS

NOTES:

1. SEE SPECIAL NOTES ENTITLED "OWNER REQUIREMENTS FOR WATER MAINS AND APPURTENANCES" FOR INFORMATION ON ADDITIONAL REQUIREMENTS.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ELEVATIONS OF EXISTING UTILITIES TO ENSURE ADEQUATE CLEARANCE FOR THE WATER LINE EXISTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER (IN WRITING) OF CONFLICTING ELEVATIONS, ALLOWING THE ENGINEER ADEQUATE TIME TO REVISE GRADES WITHOUT NECESSITATING REMOVAL AND RECONSTRUCTION OF WORK ALREADY COMPLETED BY THE CONTRACTOR.
3. DETAILS SHOWN ON THIS SHEET ARE BASED UPON TYPE 4 LAYING CONDITION DESCRIBED IN AWWA STANDARD C600. SELECT GRANULAR FILL AND SAND BACKFILL ARE ASSUMED TO HAVE A FRICTION ANGLE OF 30° AND A UNIT WEIGHT OF 90 LBS./CUBIC FEET.
4. THE TOP PAYMENT LINE FOR TRENCH EXCAVATION SHALL BE PER SECTION 206.
5. BEDDING BELOW THE PIPE INVERT SHALL BE REQUIRED ONLY WHEN NOTED IN THE OWNER REQUIREMENTS OR WHEN ROCK OR UNSTABLE OR UNSUITABLE CONDITIONS ARE ENCOUNTERED.
6. IF UNSTABLE OR UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED NEAR THE INVERT ELEVATION, A MINIMUM OF 1' AND A MAXIMUM OF 2' OF MATERIAL SHALL BE EXCAVATED A.D.B.E. AND REPLACED WITH SELECT GRANULAR FILL. ADDITIONAL PAYMENT WILL BE MADE FOR MATERIAL PLACED TO TREAT UNSTABLE OR UNSUITABLE CONDITIONS.
7. NEW WATER MAINS INSTALLED PARALLEL TO STORM AND/OR SANITARY SEWER CONDUITS SHALL HAVE A MINIMUM OF 10' HORIZONTAL SEPARATION (MEASURED EDGE OF PIPE TO EDGE OF PIPE) WHENEVER POSSIBLE. WHEN 10' HORIZONTAL SEPARATION CANNOT BE MAINTAINED A VERTICAL SEPARATION OF AT LEAST 1'-6" BETWEEN BOTTOM OF WATER MAIN AND TOP OF SEWER PIPE SHALL BE MAINTAINED. IF NEITHER SEPARATION CAN BE MAINTAINED, THE WATER AND SEWER SHALL BE CONSTRUCTED AS SHOWN ON THE CONTRACT PLANS AND APPROVED BY THE APPROPRIATE HEALTH AGENCY.
8. BACKFILL SHALL BE INSTALLED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS OF §203-3.06.
9. UPON COMPLETION OF ALL WATER SUPPLY RELATED CONSTRUCTION, INCLUDING BACKFILL, HYDROSTATIC TESTING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA STANDARD C600 WITH THE MAINS THOROUGHLY FLUSHED PRIOR TO TESTING. UNLESS OTHERWISE NOTED, THE SYSTEM SHALL BE SUBJECTED TO A PRESSURE/LEAKAGE TEST WITH WATER UNDER A MINIMUM HYDROSTATIC PRESSURE OF 150 PSI FOR A MINIMUM OF TWO (2) HOURS.
10. UPON COMPLETION OF ALL WATER SUPPLY RELATED CONSTRUCTION, ALL MAINS, VALVES, HYDRANTS, AND OTHER APPURTENANCES BUILT UNDER THIS CONTRACT SHALL BE DISINFECTED, FLUSHED, AND TESTED FOR BACTERIOLOGICAL QUALITY IN ACCORDANCE WITH AWWA STANDARD C651. THE TABLET METHOD SHALL NOT BE USED FOR CHLORINATION OF SOLVENT WELDED PLASTIC OR SCREWED-JOINT STEEL PIPE DUE TO THE DANGER OF FIRE OR EXPLOSION FROM THE REACTION OF JOINT COMPOUNDS WITH CALCIUM HYPOCHLORITE.

MAXIMUM JOINT DEFLECTION			
NPS SIZE	PUSH-ON JOINTS		MJ JOINTS
	18' DI	20' DI	18/20 FT.
3	5°	5°	8°
4	5°	5°	8°
6	5°	5°	7°
8	5°	5°	5°
10	5°	5°	5°
12	5°	5°	5°
14	3°	3°	3.5°
16	3°	3°	3.5°
18	3°	3°	3°
20	3°	3°	3°
24	3°	3°	2°
30	3°	3°	N/A
36	3°	3°	N/A
42	3°	3°	N/A
48	N/A	3°	N/A
54	N/A	3°	N/A
60	N/A	3°	N/A
64	N/A	3°	N/A

EXCAVATION PAYMENT WIDTHS	
NPS SIZE	TRENCH WIDTH
3	3'-0"
4	3'-0"
6	3'-0"
8	3'-6"
10	4'-0"
12	4'-0"
14	4'-0"
16	4'-0"
18	4'-0"
20	4'-0"
24	4'-0"
30	4'-6"
36	5'-0"
42	5'-6"
48	6'-0"
54	6'-6"
60	7'-0"
64	7'-6"

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WATER MAIN PIPE INSTALLATION DETAILS

ERRATA
ERRATA 3 JANUARY 1, 2023 ISSUED WITH EB 23-029
ERRATA 2 MAY 1, 2021 ISSUED WITH EB 21-006
ERRATA 1 MAY 1, 2018 ISSUED WITH EB 18-003

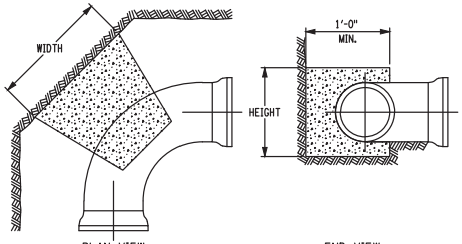
APPROVED AUGUST 30, 2013

/S/ RICHARD W. LEE, P.E.

FOR THE DEPUTY CHIEF ENGINEER (DESIGN)

ISSUED UNDER EB 13-038

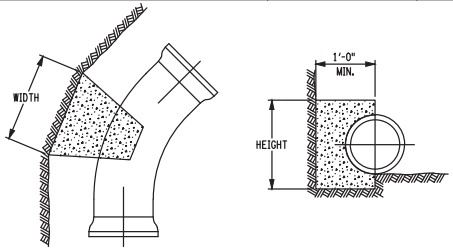
663-01



PLAN VIEW END VIEW

90° BEND THRUST BLOCK DIMENSIONING

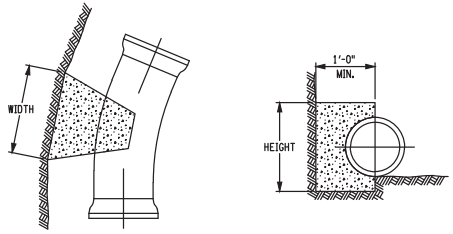
PIPE SIZE	WIDTH (FT-IN)	HEIGHT (FT-IN)	PIPE SIZE	WIDTH (FT-IN	HEIGHT (FT-IN)
4 NPS	2'-3"	1'-3"	14 NPS	7'-3"	3'-6"
6 NPS	3'-3"	1'-9"	16 NPS	8'-3"	4'-0"
8 NPS	4'-3"	2'-3"	18 NPS	9'-3"	4'-6"
10 NPS	5'-3"	2'-6"	20 NPS	10'-6"	5'-0"
12 NPS	6'-0"	3'-3"	24 NPS	12'-6"	6'-0"



PLAN VIEW END VIEW

45° BEND THRUST BLOCK DIMENSIONING

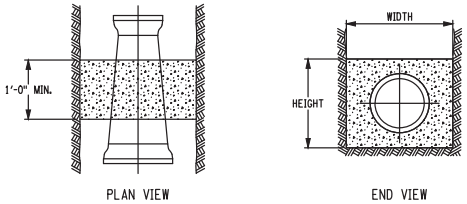
PIPE SIZE	WIDTH (FT-IN)	HEIGHT (FT-IN)	PIPE SIZE	WIDTH (FT-IN	HEIGHT (FT-IN)
4 NPS	2'-0"	0'-9"	14 NPS	5'-3"	2'-6"
6 NPS	2'-6"	1'-3"	16 NPS	5'-6"	3'-3"
8 NPS	3'-3"	1'-9"	18 NPS	7'-3"	3'-3"
10 NPS	4'-0"	2'-0"	20 NPS	7'-3"	4'-0"
12 NPS	4'-6"	2'-3"	24 NPS	8'-9"	4'-6"



PLAN VIEW END VIEW

22½° BEND THRUST BLOCK DIMENSIONING

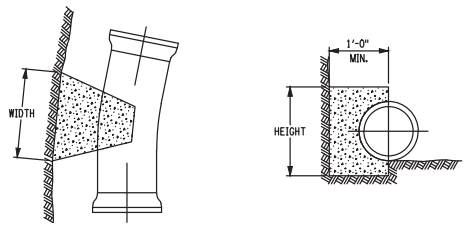
PIPE SIZE	WIDTH (FT-IN)	HEIGHT (FT-IN)	PIPE SIZE	WIDTH (FT-IN	HEIGHT (FT-IN)
4 NPS	1'-3"	0'-9"	14 NPS	3'-6"	2'-0"
6 NPS	2'-0"	0'-9"	16 NPS	4'-6"	2'-3"
8 NPS	2'-3"	1'-3"	18 NPS	5'-0"	2'-6"
10 NPS	3'-0"	1'-3"	20 NPS	5'-0"	3'-0"
12 NPS	3'-3"	1'-9"	24 NPS	6'-3"	3'-3"



PLAN VIEW END VIEW

REDUCER THRUST BLOCK DIMENSIONING

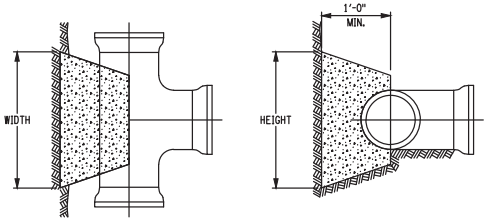
SIZE	WIDTH (FT-IN)	HEIGHT (FT-IN)	SIZE	WIDTH (FT-IN	HEIGHT (FT-IN)
6x4 NPS	1'-6"	1'-6"	16x8 NPS	4'-6"	4'-6"
8x4 NPS	2'-3"	2'-3"	16x10 NPS	4'-0"	4'-0"
8x6 NPS	1'-9"	1'-9"	16x12 NPS	3'-6"	3'-6"
10x6 NPS	2'-6"	2'-6"	20x12 NPS	5'-0"	5'-0"
10x8 NPS	2'-0"	2'-0"	20x16 NPS	4'-0"	4'-0"
12x6 NPS	3'-3"	3'-3"	24x12 NPS	6'-6"	6'-6"
12x8 NPS	3'-0"	3'-0"	24x16 NPS	5'-9"	5'-9"
12x10 NPS	2'-3"	2'-3"	24x20 NPS	4'-6"	4'-6"



PLAN VIEW END VIEW

11¼° BEND THRUST BLOCK DIMENSIONING

PIPE SIZE	WIDTH (FT-IN)	HEIGHT (FT-IN)	PIPE SIZE	WIDTH (FT-IN	HEIGHT (FT-IN)
4 NPS	1'-0"	0'-6"	14 NPS	3'-0"	1'-3"
6 NPS	1'-3"	0'-9"	16 NPS	3'-3"	1'-3"
8 NPS	1'-9"	0'-9"	18 NPS	3'-6"	1'-3"
10 NPS	2'-0"	1'-0"	20 NPS	3'-6"	2'-0"
12 NPS	2'-3"	1'-3"	24 NPS	4'-6"	2'-3"



PLAN VIEW END VIEW

TEE/DEAD END THRUST BLOCK DIMENSIONING

PIPE SIZE	WIDTH (FT-IN)	HEIGHT (FT-IN)	PIPE SIZE	WIDTH (FT-IN	HEIGHT (FT-IN)
4 NPS	2'-0"	1'-0"	14 NPS	5'-6"	3'-3"
6 NPS	3'-0"	1'-3"	16 NPS	6'-6"	3'-6"
8 NPS	3'-3"	2'-0"	18 NPS	7'-6"	4'-0"
10 NPS	4'-3"	2'-3"	20 NPS	8'-6"	4'-3"
12 NPS	5'-3"	2'-6"	24 NPS	10'-3"	5'-3"

NOTES:

1. SEE SPECIAL NOTES ENTITLED "OWNER REQUIREMENTS FOR WATER MAINS AND APPURTENANCES" FOR ADDITIONAL INFORMATION ON THRUST RESTRAINT REQUIREMENTS.
2. THRUST RESTRAINT USING THRUST BLOCKS OR RESTRAINED LENGTHS ARE SHOWN ON THESE SHEETS. THRUST BLOCKS, RESTRAINED JOINTS USING TIE RODS, OR RETAINER GLANDS ARE ALL ACCEPTABLE METHODS TO NYSDOT. HOWEVER, THE THRUST RESTRAINT METHOD SELECTED SHALL BE APPROVED BY THE SYSTEM OWNER.
3. IF THE OWNER OF THE WATER SYSTEM REQUIRES A METHOD THAT RESTRAINS INDIVIDUAL JOINTS, EACH JOINT THAT FALLS WITHIN THE MINIMUM RESTRAINED LENGTH, MEASURED FROM THE CENTER OF THE FITTING, AS SHOWN ON THESE SHEETS SHALL BE RESTRAINED, AND SHALL WITHSTAND THE MAXIMUM PRESSURE APPLIED TO THE SYSTEM.
4. CLASS A CONCRETE SHALL NOT BE PLACED UNDER WATER. THE CONTRACTOR SHALL DEWATER THE EXCAVATION OR PLACE TYPE G CONCRETE USING APPROPRIATE UNDERWATER PLACEMENT TECHNIQUES.
5. CONCRETE FOR THRUST BLOCKS SHALL NOT BE ALLOWED TO COVER OR INTERFERE WITH JOINT OR RESTRAINT HARDWARE. PLASTIC SHEETING OR BUILDING FELT MAY BE PLACED OVER PIPE OR FITTINGS TO PREVENT CONCRETE FROM ADHERING TO SURFACES. CONCRETE FOR THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
6. FOR BENDS, BEARING AREA SHALL BE PARALLEL TO THE EDGE OF THE FITTING AT THE FITTING MIDPOINT.
7. FOR TEES, BEARING AREA SHALL BE PERPENDICULAR TO THE BRANCH (SINGLE LEG) AXIS.
8. FOR REDUCERS, BEARING AREA SHALL BE PERPENDICULAR TO THE FITTING AXIS. THE MINIMUM THICKNESS ALONG THE FITTING AXIS SHALL BE 1'-0" OR THE LENGTH BETWEEN THE BELLS, WHICHEVER IS SMALLER.
9. THRUST RESTRAINTS FOR SIZES OVER 24 NPS OR FOR FITTINGS NOT SHOWN ON THESE SHEETS WILL BE DESIGNED ON A CASE BY CASE BASIS, AND WILL BE SHOWN IN THE CONTRACT DOCUMENTS.
10. THRUST BLOCK SIZES AND MINIMUM RESTRAINED LENGTHS SHOWN ON THESE SHEETS ARE BASED UPON THE FOLLOWING STANDARD CONDITIONS:
    - 1.5 - SAFETY FACTOR
    - 5'-0" - DEPTH OF COVER
    - 200 PSI - WATER SYSTEM TEST PRESSURE
    - 14 PSI - SOIL BEARING CAPACITY
    - 90 LB/CF - SOIL UNIT WEIGHT
11. FOR INSTALLATIONS NOT MEETING THE CONDITIONS OF NOTE 10, THE CONTRACTOR SHALL SUBMIT CALCULATIONS TO THE ENGINEER FOR APPROVAL OF RESTRAINT LENGTH CHOSEN.
12. TO DETERMINE REQUIRED SIZES FOR DIFFERENT CONDITIONS, MULTIPLY THE DIMENSION BY A FACTOR OF THE SPECIFIC VALUE DIVIDED BY THE STANDARD VALUE.

    EXAMPLE: FIND THRUST BLOCK DIMENSION FOR 12 NPS 45° BEND WITH 100 PSI TEST PRESSURE:

    FROM TABLE "45° BEND THRUST BLOCK DIMENSIONING",
    AREA REQUIRED AT 200 PSI IS 4'-6" X 2'-3" = 10.125 SF
    FOR 100 PSI, AREA = 10.125 X (100/200) = 5.06 SF
    USE WIDTH = 3'-6", HEIGHT = 1'-6" (AREA = 5.25 SF)

MINIMUM RESTRAINED LENGTH OF PIPE (FT-IN) L_R

FITTING	4 NPS	6 NPS	8 NPS	10 NPS	12 NPS	14 NPS	16 NPS	18 NPS	20 NPS	24 NPS
11 ¼° BEND	1'-3"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-3"
22 ½° BEND	1'-3"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-6"
45° BEND	3'-0"	4'-0"	5'-3"	6'-3"	7'-6"	8'-6"	9'-6"	10'-6"	11'-6"	13'-6"
90° BEND	7'-0"	9'-9"	12'-6"	15'-6"	18'-0"	20'-0"	23'-0"	25'-6"	28'-0"	32'-6"
DEAD END	8'-6"	12'-6"	16'-0"	19'-3"	23'-0"	26'-0"	29'-6"	33'-0"	36'-0"	42'-0"
NOTE: PVC PIPE WILL TYPICALLY HAVE SLIGHTLY GREATER RESTRAINED LENGTH										
NOTE: FOR POLYETHYLENE WRAPPED PIPE, MULTIPLY VALUES IN TABLE BY 1.45										

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

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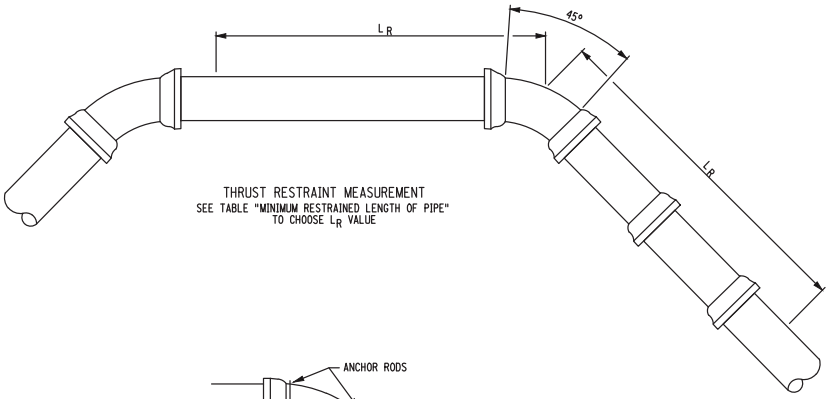
WATER MAIN
HORIZONTAL THRUST RESTRAINT DETAILS

APPROVED NOVEMBER 1, 2011
/S/ RICHARD W. LEE, P.E.
DEPUTY CHIEF ENGINEER DESIGN
(ACTING)

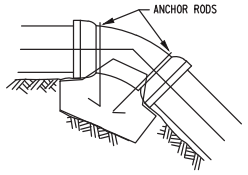
ISSUED UNDER EB 11-025

663-02

EFFECTIVE DATE: 05/03/2012



THRUST RESTRAINT MEASUREMENT
SEE TABLE "MINIMUM RESTRAINED LENGTH OF PIPE"
TO CHOOSE L_R VALUE



VERTICAL BEND GRAVITY BLOCK - ELEVATION

NOTES:

1. SEE SPECIAL NOTES ENTITLED "OWNER REQUIREMENTS FOR WATER MAINS AND APPURTENANCES" FOR ADDITIONAL INFORMATION ON THRUST RESTRAINT REQUIREMENTS.
2. THRUST RESTRAINT USING THRUST BLOCKS OR RESTRAINED LENGTHS ARE SHOWN ON THESE SHEETS. THRUST BLOCKS, RESTRAINED JOINTS USING TIE RODS OR RETAINER GLANDS ARE ALL ACCEPTABLE METHODS TO NYSDOT. HOWEVER, THE THRUST RESTRAINT METHOD SELECTED SHALL BE APPROVED BY THE SYSTEM OWNER.
3. IF THE OWNER OF THE WATER SYSTEM ALLOWS A METHOD THAT RESTRAINS INDIVIDUAL JOINTS, EACH JOINT THAT FALLS WITHIN THE MINIMUM RESTRAINED LENGTH, MEASURED FROM THE CENTER OF THE FITTING, AS SHOWN ON THESE SHEETS SHALL BE RESTRAINED, AND SHALL WITHSTAND THE MAXIMUM PRESSURE APPLIED TO THE SYSTEM.
4. CLASS A CONCRETE SHALL NOT BE PLACED UNDERWATER. THE CONTRACTOR SHALL DE WATER THE EXCAVATION OR PLACE TYPE "G" CONCRETE USING APPROPRIATE UNDERWATER PLACEMENT TECHNIQUES.
5. CONCRETE FOR THRUST BLOCKS SHALL NOT BE ALLOWED TO COVER OR INTERFERE WITH JOINT OR RESTRAINT HARDWARE. PLASTIC SHEETING OR BUILDING FELT MAY BE PLACED OVER PIPE OR FITTINGS TO PREVENT CONCRETE FROM ADHERING TO SURFACES.
6. THRUST BLOCK ANCHOR RODS SHALL MEET THE REQUIREMENTS OF §709-03 OF THE STANDARD SPECIFICATIONS. ALL EMBEDDED RODS SHALL HAVE STANDARD ACI HOOKS ON EACH END, AND SHALL HAVE A MINIMUM OF 3" CONCRETE COVER IN ALL DIRECTIONS.
7. THRUST RESTRAINT FOR SIZES OVER 24 NPS AND/OR FOR OTHER FITTINGS NOT SHOWN ON THESE SHEETS WILL BE AS SHOWN IN THE CONTRACT DOCUMENTS.
8. THRUST BLOCK SIZES AND MINIMUM RESTRAINED LENGTHS SHOWN ON THESE SHEETS ARE BASED UPON THE FOLLOWING ASSUMED CONDITIONS:
   - 1.5 SAFETY FACTOR
   - 5 FT DEPTH OF COVER
   - 200 PSI WATER SYSTEM TEST PRESSURE
   - 30° SOIL FRICTION ANGLE
   - 90 LBS\FT^3 SOIL UNIT WEIGHT
   - IF SOILS ARE POORER THEN REFER TO REFERENCES
9. FOR INSTALLATIONS NOT MEETING THE CONDITIONS OF NOTE 8, THE CONTRACTOR SHALL SUBMIT CALCULATIONS TO THE ENGINEER FOR APPROVAL OF RESTRAINT LENGTH CHOSEN.
10. TO DETERMINE REQUIRED SIZES FOR DIFFERENT TEST PRESSURES, MULTIPLY THE DIMENSION BY A FACTOR OF THE SPECIFIC VALUE DIVIDED BY THE STANDARD VALUE.

    EXAMPLE: GRAVITY BLOCK VOLUME FOR 12 NPS 45° BEND WITH 100 PSI TEST PRESSURE:
    WIDTH = 3'-3"
    HEIGHT = 1'-7"
    VOLUME REQUIRED 134 FT^3 X (100/200) = 67 FT^3

REFERENCES:

1. DUCTILE IRON PIPE RESEARCH ASSOCIATION
2. EBAA IRON CONNECTIONS TECHNICAL DATA SERIES

MINIMUM GRAVITY BLOCK VOLUMES FOR VERTICAL BENDS (CU.FT.)										
FITTING	4 NPS	6 NPS	8 NPS	10 NPS	12 NPS	14 NPS	16 NPS	18 NPS	20 NPS	24 NPS
11 1/4°	4	11	18	25	35	46	60	74	92	131
22 1/2°	11	18	32	49	67	92	120	148	184	261
45°	18	35	64	95	134	180	233	293	360	512
90°	32	67	117	177	247	332	431	540	664	950

MINIMUM RESTRAINED LENGTH OF PIPE (L_R)										
VERTICAL UPWARD BENDS - NPS (FT.)										
FITTING	4 NPS	6 NPS	8 NPS	10 NPS	12 NPS	14 NPS	16 NPS	18 NPS	20 NPS	24 NPS
11 1/4°	1.5	2.0	3.0	3.0	4.0	4.0	5.0	5.0	6.0	6.5
22 1/2°	1.5	2.0	3.0	3.0	4.0	4.0	5.0	5.0	6.0	7.0
45°	3.0	4.0	5.5	6.5	8.0	9.0	10.0	10.5	11.5	13.5
90°	7.0	10.0	12.5	15.5	18.5	20.5	23.0	26.0	28.0	32.5
VERTICAL DOWNWARD BENDS - NPS (FT.)										
FITTING	4 NPS	6 NPS	8 NPS	10 NPS	12 NPS	14 NPS	16 NPS	18 NPS	20 NPS	24 NPS
11 1/4°	3.5	5.0	6.5	8.0	9.5	10.5	12.0	13.0	14.5	17.0
22 1/2°	7.0	10.0	13.0	15.5	18.5	21.0	24.0	26.5	29.0	34.0
45°	14.5	20.5	27.0	32.5	38.5	44.0	49.0	54.5	60.0	70.0
90°	35.0	49.5	64.0	78.0	92.0	105.0	118.5	131.5	144.5	169.0

NOTE: FOR POLYETHYLENE WRAPPED PIPE, MULTIPLY VALUES IN TABLE BY 1.45

NOTE: FOR PVC PIPE MULTIPLY VALUES IN TABLE BY 1.15

ANCHOR ROD SCHEDULE FOR GRAVITY BLOCKS		
PIPE SIZE	RODS	MIN. EMBEDMENT LENGTH
4 NPS	1 - (3)	6"
6 NPS	1 - (3)	6"
8 NPS	2 - (4)	6"
10 NPS	2 - (4)	6"
12 NPS	2 - (5)	7"
14 NPS	2 - (6)	8"
16 NPS	2 - (6)	8"
18 NPS	2 - (7)	10"
20 NPS	2 - (8)	11"
24 NPS	2 - (9)	12"

NUMBERS IN PARENTHESIS ARE BAR SIZES MARKED IN EIGHTHS OF INCHES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY STANDARD SHEET

WATER MAIN
VERTICAL THRUST RESTRAINT DETAILS

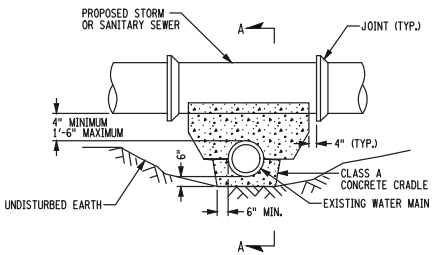
APPROVED NOVEMBER 1, 2011

/S/ RICHARD W. LEE, P.E.
DEPUTY CHIEF ENGINEER DESIGN

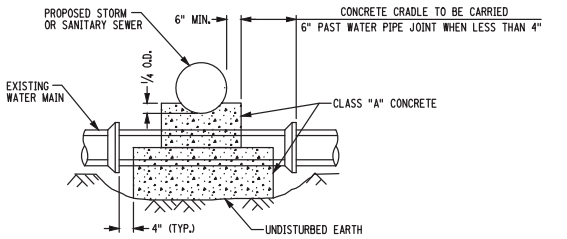
ISSUED UNDER EB 11-025

663-03

EFFECTIVE DATE: 05/03/2012



ELEVATION

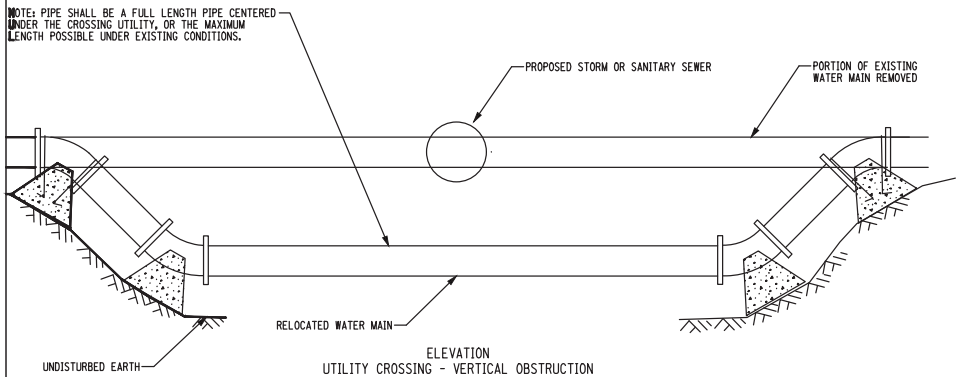


SECTION A-A

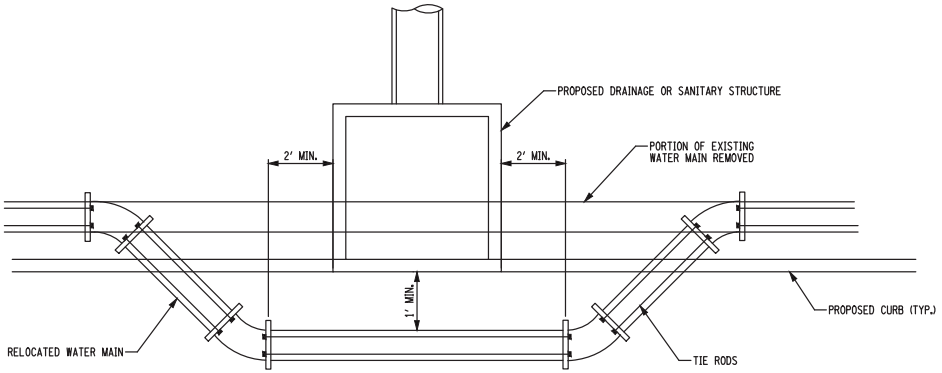
UTILITY CROSSING - VERTICAL OBSTRUCTION
LACKING REQUIRED VERTICAL OFFSET
PROPOSED STORM SEWER CROSSING WATER MAIN WITH 4" - 18" OF VERTICAL SEPARATION

NOTES:

1. SEE SPECIAL NOTES ENTITLED "OWNER REQUIREMENTS FOR WATER MAINS AND APPURTENANCES" FOR INFORMATION ON ADDITIONAL THRUST RESTRAINT REQUIREMENTS.
2. WATER MAIN RELOCATION WORK MAY BE REQUIRED WHERE PROPOSED STORM DRAINS CROSS AN EXISTING WATER MAIN. THE CONTRACTOR SHALL ESTABLISH THE DEPTH OF THE WATER MAIN AT ALL CROSSING POINTS. THE ENGINEER WILL THEN VERIFY THE EXTENT OF THE WATER MAIN RELOCATION WORK REQUIRED.
3. UNLESS OTHERWISE NOTED IN THE OWNER REQUIREMENTS, A SINGLE METHOD OF THRUST RESTRAINT SHALL BE PROVIDED AT EACH FITTING THAT CREATES A THRUST IN ACCORDANCE WITH PRESSURE PIPE THRUST RESTRAINT DETAILS.
4. THE OFFSET OF A WATER MAIN TO AVOID AN OBSTRUCTION SHALL BE ACCOMPLISHED USING A MINIMUM NUMBER AND WEIGHT OF FITTINGS.
5. ENCASEMENT OF A WATER MAIN IN A CONCRETE CRADLE DUE TO PROXIMITY OF A STORM SEWER WILL BE INSTALLED IN ACCORDANCE WITH SECTION 501, WITH THE EXCEPTION THAT BATCHING REQUIREMENTS SHALL NOT APPLY.



ELEVATION
UTILITY CROSSING - VERTICAL OBSTRUCTION
WITH REQUIRED VERTICAL OFFSET
NOTE: THRUST BLOCKS SHOWN, THRUST RESTRAINT MAY BE PROVIDED BY ANY SINGLE METHOD IN ACCORDANCE WITH WATER MAIN THRUST RESTRAINT DETAILS



PLAN VIEW
UTILITY CROSSING - HORIZONTAL OBSTRUCTION
NOTE: TIE RODS SHOWN, THRUST RESTRAINT MAY BE PROVIDED BY ANY SINGLE METHOD IN ACCORDANCE WITH WATER MAIN THRUST RESTRAINT DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY STANDARD SHEET

WATER MAIN
UTILITY CROSSING RELOCATION DETAILS

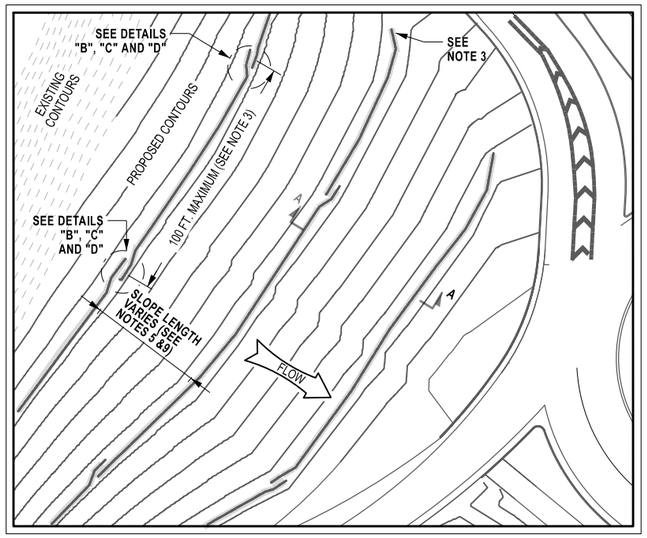
APPROVED SEPTEMBER 19, 2008

/S/ DANIEL D'ANGELO, P.E.
DEPUTY CHIEF ENGINEER
DESIGN

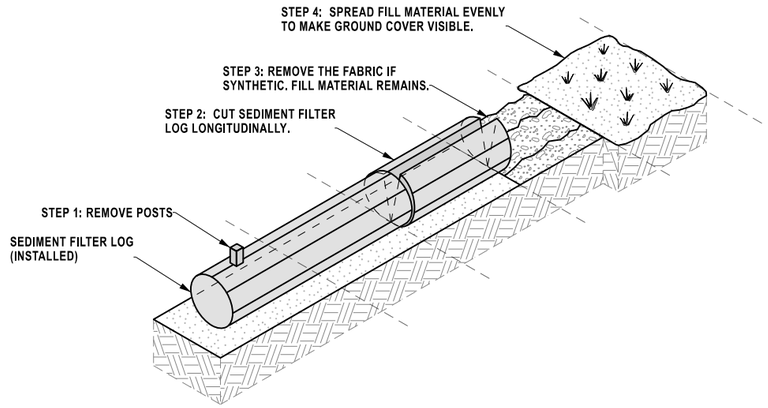
ISSUED UNDER EB 08-036

663-04

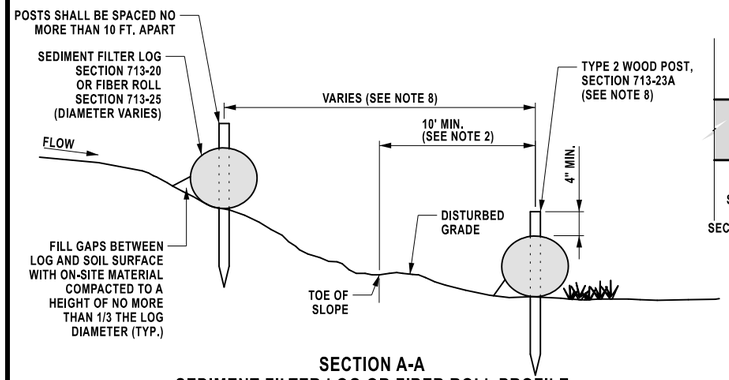
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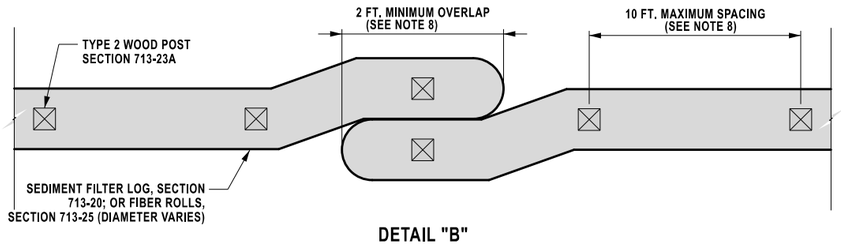
PLAN
SILT FENCE, SEDIMENT FILTER LOG OR FIBER ROLL PLACEMENT EXAMPLE
SEDIMENT FILTER LOG SHOWN



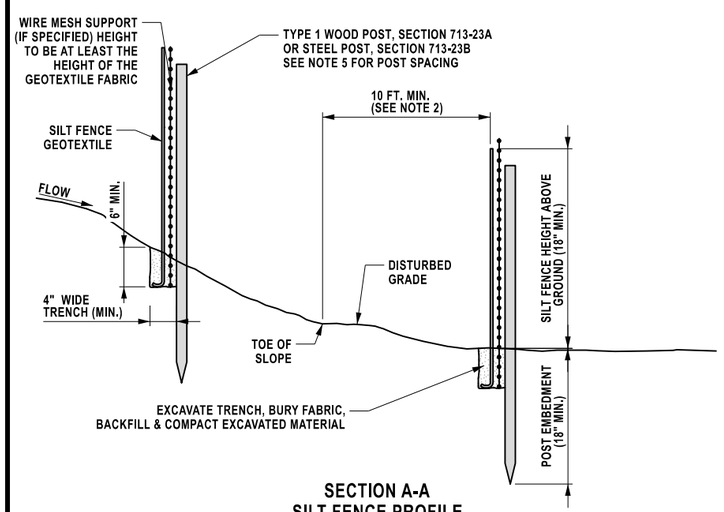
DETAIL "A"
SEDIMENT FILTER LOG - REUSE FILL MATERIAL DETAIL
(SEE NOTE 9)



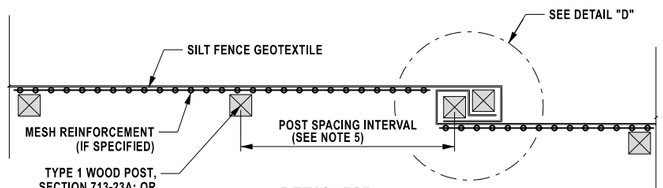
SECTION A-A
SEDIMENT FILTER LOG OR FIBER ROLL PROFILE



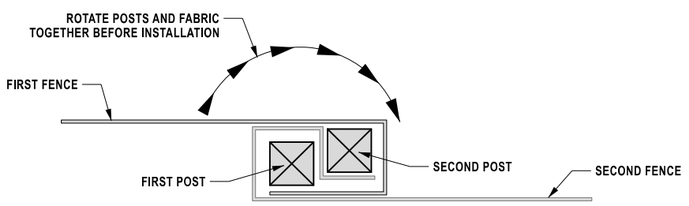
DETAIL "B"
SEDIMENT FILTER LOG OR FIBER ROLL END OVERLAP DETAIL



SECTION A-A
SILT FENCE PROFILE



DETAIL "C"
SILT FENCE POST PLACEMENT



DETAIL "D"
SILT FENCE END WRAPPING DETAIL

NOT TO SCALE

APPLICATION NOTES:

A. THE PRIMARY PURPOSE OF SILT FENCE, SEDIMENT FILTER LOGS OR FIBER ROLLS IS TO INTERCEPT SEDIMENT-LADEN RUNOFF BY IMPOUNDING WATER BEHIND THE ITEM SO THAT SEDIMENT FALLS OUT OF SUSPENSION.

B. IDENTIFY ON-SITE AND OFF-SITE RESOURCES THAT NEED TO BE PROTECTED USING THE SILT FENCE, SEDIMENT FILTER LOG, FIBER ROLL OR SOIL STABILIZERS (713-07 CLASS IV) (E.G. WETLANDS, PONDS, WATERWAYS OR ENVIRONMENTALLY SENSITIVE AREAS). SILT FENCE, SEDIMENT FILTER LOG AND FIBER ROLL ARE TYPICALLY USED WITH EROSION CONTROL MEASURES, SUCH AS MULCH AND/OR ROLLED EROSION CONTROL PRODUCT.

C. SILT FENCE, SEDIMENT FILTER LOGS OR FIBER ROLLS SHALL NOT BE USED IN OR ACROSS A FLOWING CHANNEL, OR AREAS OF CONCENTRATED FLOW. DO NOT USE SILT FENCE, SEDIMENT FILTER LOG OR FIBER ROLL AS A PERIMETER CONTROL, TO DEFINE PROPERTY LINES, OR TO DELINEATE A RESOURCE.

GENERAL NOTES:

1. SILT FENCE, SEDIMENT FILTER LOGS OR FIBER ROLLS SHALL BE INSTALLED ON A LINE OF EQUAL ELEVATION (CONTOUR). IT MAY BE INSTALLED AT INTERMEDIATE POINTS UP SLOPES AS WELL AS AT THE BOTTOM.

2. FOR LOCATIONS THAT WARRANT PLACEMENT OF SILT FENCE, SEDIMENT FILTER LOGS AND FIBER ROLLS AT THE BASE OF SLOPES, SILT FENCE, SEDIMENT FILTER LOG OR FIBER ROLL SHALL BE PLACED A MINIMUM OF 10 FEET FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE AREA FOR SEDIMENT STORAGE AND FACILITATE MAINTENANCE OF THE SEDIMENT CONTAINMENT AREA.

3. THE ENDS OF A ROW OF SILT FENCE, SEDIMENT FILTER LOGS OR FIBER ROLLS SHALL BE ANGLED UPSLOPE TO PREVENT CHANNELIZED FLOW FROM BEING CONVEYED PAST THE ENDS OF THE FENCE. A SECTION OF SILT FENCE, SEDIMENT FILTER LOGS OR FIBER ROLLS SHOULD NOT EXCEED 100 FEET IN LENGTH.

4. THE FOLLOWING ARE MAXIMUM SLOPE LENGTHS (DISTANCE BETWEEN ROWS) FOR SILT FENCE INSTALLATION:

SILT FENCE MAXIMUM SLOPE LENGTH (FEET)			
SLOPE	STEEPNESS	STANDARD**	REINFORCED***
*5-10%	20:1 TO 10:1	125	250
10-20%	10:1 TO 5:1	100	150
20-33%	5:1 TO 3:1	60	80
33-50%	3:1 TO 2:1	40	70
> 50%	> 2:1	20	30

* FOR SLOPES LESS THAN 5% SILT FENCE IS NOT REQUIRED UNLESS IN SENSITIVE AREAS OR HIGHLY ERODIBLE SOILS.

** STANDARD SILT FENCE IS FABRIC ROLLS STAPLED TO WOODEN POSTS DRIVEN 18 INCHES INTO THE GROUND.

*** REINFORCED SILT FENCE IS FABRIC PLACED AGAINST WELDED WIRE MESH WITH ANCHORED STEEL POSTS DRIVEN 18 INCHES INTO THE GROUND.

5. SILT FENCE POSTS SHALL COMPLY WITH SECTION 713-23 A. TYPE 1 WOOD POSTS OR SECTION 713-23 B. STEEL POSTS. SPACING FOR SILT FENCE POSTS SHALL BE AS INDICATED ON THE DEPARTMENT'S APPROVED LIST FOR 737-01 GEOTEXTILES, SILT FENCE.

6. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED, AND STAPLED TO PREVENT SEDIMENT BYPASS, OR THE END POSTS OF TWO SECTIONS SHALL BE WRAPPED AS SHOWN IN DETAIL D FOR SILT FENCE END WRAPPING.

7. THE BOTTOM EDGE OF SILT FENCE GEOTEXTILE SHALL BE BURIED A MINIMUM OF 6" BELOW GROUND. THE FENCE SHALL BE INSTALLED WITH THE POSTS ON THE DOWNSLOPE SIDE OF THE FABRIC.

8. SEDIMENT FILTER LOG POSTS SHALL BE SECTION 713-23 A. TYPE 2 WOOD POSTS, AND SHALL BE SPACED NO MORE THAN 10 FEET APART. ENDS OF LOGS SHALL BE OVERLAPPED BY 24 INCHES AND STAKED SIDE BY SIDE. THE MAXIMUM SLOPE LENGTH (DISTANCE BETWEEN ROWS) SHALL NOT EXCEED THE FOLLOWING LIMITS:

SEDIMENT FILTER LOGS MAX SLOPE LENGTH (FEET)							
DIA. (IN.)	SLOPE %						
	2	5	10	20	25	33	50
12"-16"	250	225	125	65	50	40	25
18"-20"	275	250	150	70	55	45	30
24"	350	275	200	130	100	60	35

9. ACCUMULATED SEDIMENT UPSLOPE FROM EITHER THE SILT FENCE, SEDIMENT FILTER LOGS OR FIBER ROLLS SHALL BE REMOVED WHEN IT REACHES ONE-HALF OF THE ABOVE GROUND HEIGHT OF THE PRACTICE OR WHEN BULGES DEVELOP IN THE SILT FENCE FABRIC. IN ADDITION, THE ACCUMULATED SEDIMENT FROM EITHER THE SILT FENCE, SEDIMENT FILTER LOGS OR FIBER ROLLS SHALL BE REMOVED BEFORE EITHER PRACTICE ARE REMOVED (AFTER FINAL STABILIZATION). SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL, SECTION 203-3.01E, OR IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

10. MEASURES SHALL BE INSPECTED DAILY AND AFTER EVERY RUNOFF EVENT AND REPAIRED WITHIN ONE (1) CALENDAR DAY.

11. WHEN SEDIMENT FILTER LOGS OR FIBER ROLLS ARE USED, A STACKED OPTION IS ACCEPTABLE FOR 12" - 20" DIAMETER. SEE SHEET 209-02 (SHEET 5 OF 5) FOR DETAIL. POSTS SHALL BE EITHER 713-23A TYPE 2 WOOD POST OR 713-23B STEEL POST UNLESS LEFT-IN-PLACE WHEN ONLY 713-23A SHALL BE USED.

NEW YORK STATE **Department of Transportation**

U.S. CUSTOMARY STANDARD SHEET

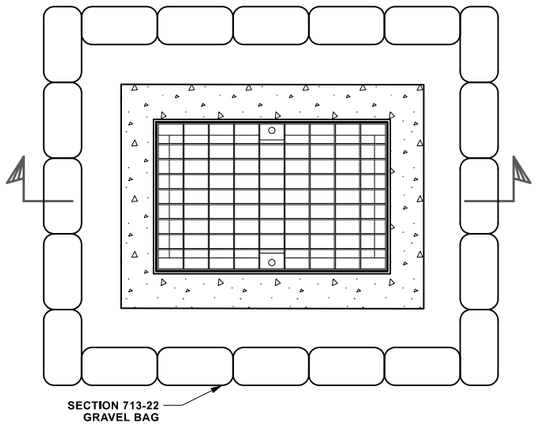
SILT FENCE, SEDIMENT FILTER LOGS (SFL), AND FIBER ROLLS

APPROVED MAY 1, 2026
DEPUTY CHIEF ENGINEER (DESIGN)

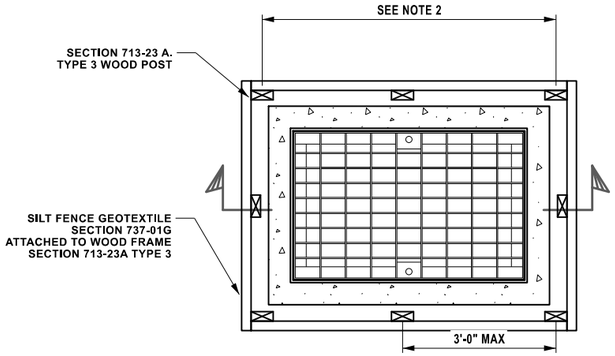
ISSUED UNDER EI 25-026

209-01

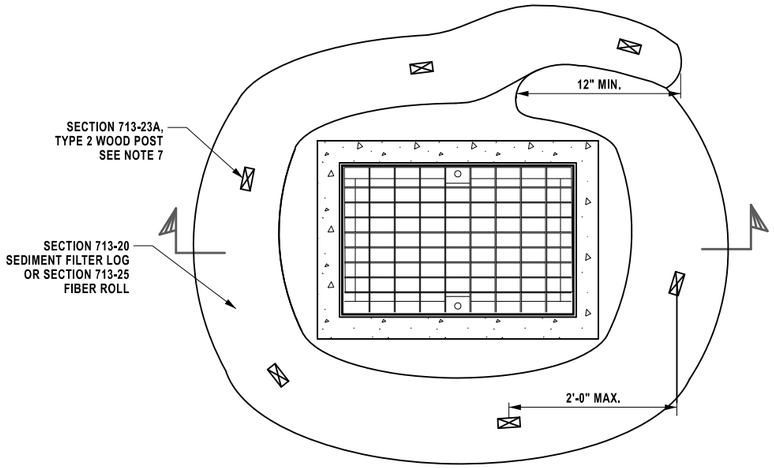
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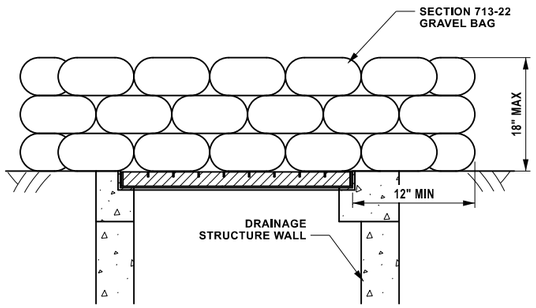
PLAN
DRAINAGE STRUCTURE INLET PROTECTION,
GRAVEL BAG - TEMPORARY



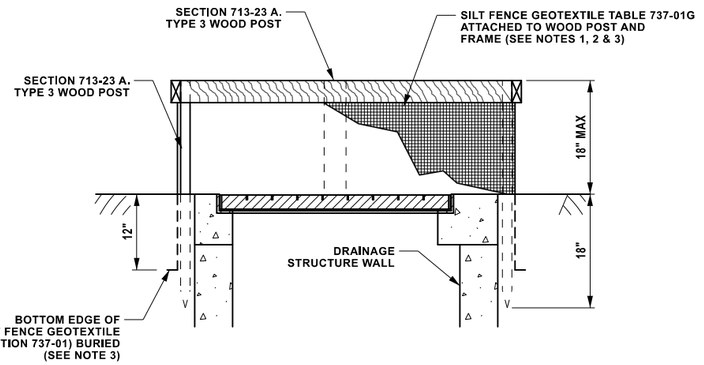
PLAN
DRAINAGE STRUCTURE INLET PROTECTION,
SILT FENCE - TEMPORARY



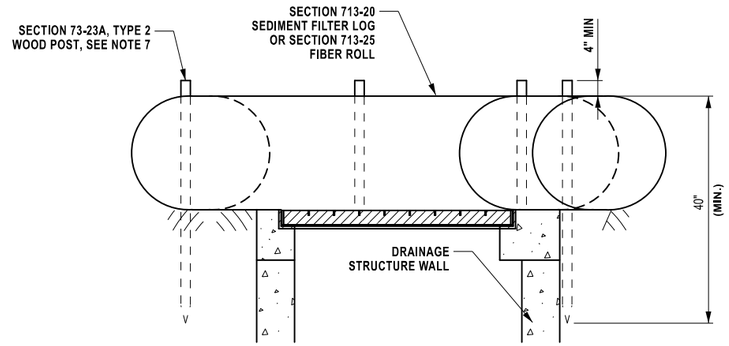
PLAN
DRAINAGE STRUCTURE INLET PROTECTION,
SEDIMENT FILTER LOG (SFL) AND FIBER ROLLS
- TEMPORARY



CROSS SECTION
DRAINAGE STRUCTURE INLET PROTECTION,
GRAVEL BAG - TEMPORARY



CROSS SECTION
DRAINAGE STRUCTURE INLET PROTECTION,
SILT FENCE - TEMPORARY



CROSS SECTION
DRAINAGE STRUCTURE INLET PROTECTION,
SEDIMENT FILTER LOG (SFL) AND FIBER ROLLS
- TEMPORARY

APPLICATION NOTES:

A. THE PRIMARY PURPOSE OF DRAINAGE STRUCTURE INLET PROTECTION - TEMPORARY IS TO PREVENT SEDIMENT FROM ENTERING A DRAINAGE SYSTEM BY TRAPPING SEDIMENT-LADEN WATER, THEREBY ALLOWING SEDIMENT TO FALL OUT OF SUSPENSION.

B. DRAINAGE STRUCTURE INLET PROTECTION - TEMPORARY SHALL NOT BE USED WITHOUT UPSLOPE EROSION CONTROL ON DISTURBED SOILS.

C. PRACTICE SHALL BE INSTALLED AS CLOSE AS PRACTICAL TO THE OUTSIDE DIMENSIONS OF THE INLET.

D. THE TOP OF THE INLET PROTECTION SHALL BE SET TO ALLOW OVERFLOW INTO THE INLET AND NOT BYPASS TO UNPROTECTED RESOURCES.

GENERAL NOTES:

1. APPROVED SILT FENCE GEOTEXTILES (TABLE 737-01G), ARE LISTED ON THE DEPARTMENT'S APPROVED LIST. SILT FENCE GEOTEXTILE SHALL BE A SINGLE CONTINUOUS PIECE TO ELIMINATE JOINTS. OVERLAP GEOTEXTILE ENDS TO THE NEXT POST.
2. SILT FENCE POSTS SHALL BE PLACED AT INLET CORNERS. ADDITIONAL STAKES MAY BE REQUIRED BETWEEN CORNERS FOR A MAXIMUM SPACING OF 3'-0". WIRE MESH MAY BE REQUIRED BEHIND GEOTEXTILE TO PROVIDE SUPPORT. POSTS SHALL BE DRIVEN CLOSE TO THE INLET TO MINIMIZE EXPOSED SOIL BETWEEN THE INLET AND THE PRACTICE. POSTS SHALL BE EMBEDDED IN THE GROUND A MINIMUM OF 18" FOR SILT FENCE OR 12" FOR SEDIMENT FILTER LOG OR FIBER ROLL.
3. SILT FENCE GEOTEXTILE SHALL BE EMBEDDED 12" AND BACKFILLED. GEOTEXTILE SHALL BE SECURELY FASTENED TO POSTS AND FRAME.
4. DRAINAGE STRUCTURE INLET PROTECTION, SILT FENCE - TEMPORARY SHALL NOT BE USED ALONG THE ACTIVE TRAVEL LANE OR SHOULDER.
5. GRAVEL BAGS SHALL COMPLY WITH SECTION 713-22 AND ARE FILLED WITH SECTION 703-02, COARSE AGGREGATE TABLE 703-04 (SIZE DESIGNATION 1 OR 2), RATHER THAN SAND, TO PREVENT SEDIMENT FROM ENTERING A DRAINAGE SYSTEM IF BAGS ARE DAMAGED DURING USE.
6. GRAVEL BAGS SHALL LAP THE JOINTS BETWEEN THE BAGS IN THE LAYER BELOW. GRAVEL BAGS SHALL BE PLACED AS CLOSE AS POSSIBLE TO THE GRATE TO MINIMIZE EXPOSED SOIL BETWEEN THE INLET AND THE PRACTICE.
7. SEDIMENT FILTER LOGS SHALL COMPLY WITH SECTION 713-20 AND FIBER ROLLS SHALL COMPLY WITH SECTION 713-25. SFL AND FIBER ROLLS SHALL BE SECURED TO THE SOIL SURFACE WITH A MINIMUM OF FOUR (4) WOODEN STAKES (SECTION 713-23A TYPE 2) SPACED A MAXIMUM OF 2' APART. WHEN DRAINAGE STRUCTURE INLET PROTECTION - SEDIMENT FILTER LOG OR FIBER ROLL IS INSTALLED ON A PAVED SURFACE, POSTS ARE NOT REQUIRED.
8. MEASURES SHALL BE INSPECTED DAILY AND AFTER EVERY RUNOFF EVENT AND REPAIRED WITHIN ONE (1) CALENDAR DAY.
9. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF THE STORAGE CAPACITY OF THE PRACTICE. SEDIMNET SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.

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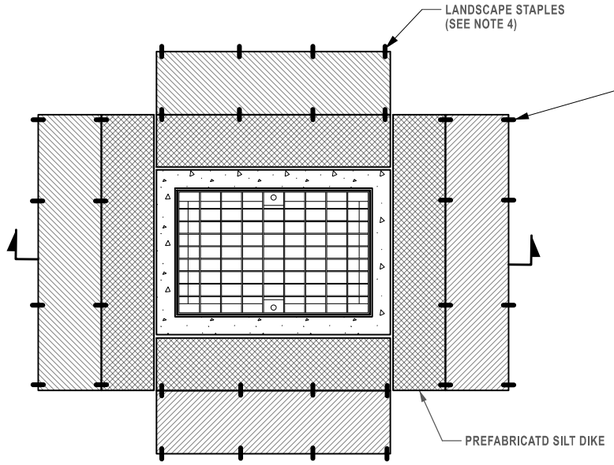
DRAINAGE STRUCTURE INLET PROTECTION
- TEMPORARY
(SHEET 1 OF 3)

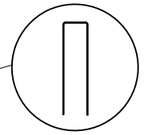
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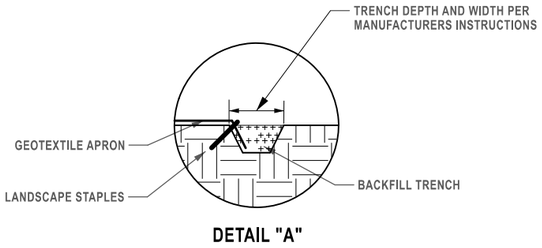
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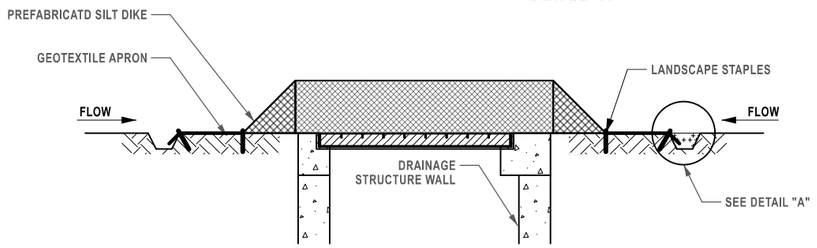




PLAN
DRAINAGE STRUCTURE INLET PROTECTION, SILT DIKE
- TEMPORARY



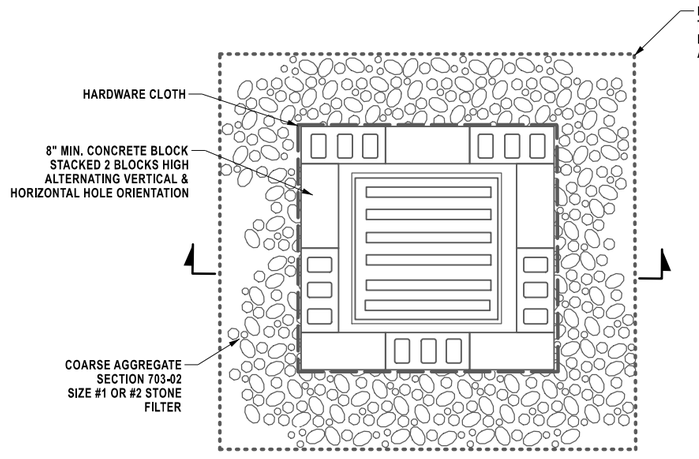
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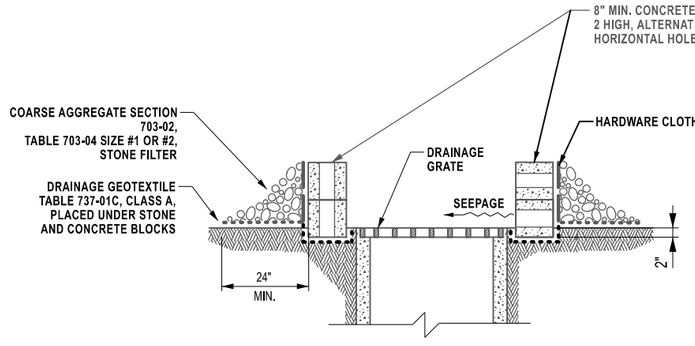
CROSS SECTION
DRAINAGE STRUCTURE INLET PROTECTION, SILT DIKE
- TEMPORARY

GENERAL NOTES:

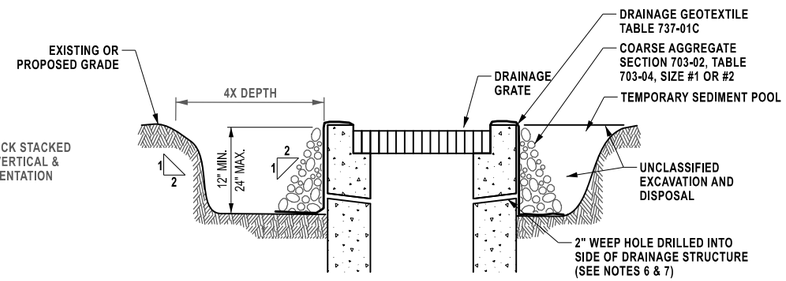
1. REFER TO APPLICATION NOTES FOR DRAINAGE STRUCTURE INLET PROTECTION ON 209-03, SHEET 1 OF 3.
2. MEASURES SHALL BE INSPECTED DAILY AND AFTER EVERY RUNOFF EVENT AND REPAIRED WITHIN ONE (1) CALENDAR DAY.
3. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF THE STORAGE CAPACITY OF THE PRACTICE. SEDIMENT SHALL BE DISPOSED AS UNSUITABLE MATERIAL.
4. SILT DIKE - INLET PROTECTION: SECURE THE ENDS OF THE GEOTEXTILE BEDDING APRON WITH LANDSCAPE STAPLES AS PER MANUFACTURER'S RECOMMENDATIONS. LANDSCAPE STAPLES SHALL BE SUPPLIED BY THE SAME MANUFACTURER AS THE SILT DIKE TO BE INSTALLED.
5. CONCRETE BLOCK - INLET PROTECTION: IS APPLICABLE WHEN HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. THIS PRACTICE SHOULD NOT BE PLACED WITHIN THE ACTIVE TRAVELWAY.
6. EXCAVATED - INLET PROTECTION: WEEP HOLES SHALL BE PROTECTED BY DRAINAGE GEOTEXTILE (TABLE 737-01C) AND COARSE AGGREGATE (SECTION 703-02), SIZE #1 OR #2.
7. EXCAVATED - INLET PROTECTION: UPON STABILIZATION OF CONTRIBUTING AREA, WEEP HOLES SHALL BE SEALED AND GEOTEXTILE REMOVED.
8. EXCAVATED - INLET PROTECTION: SHALL BE INSTALLED AT DRAINAGE LOW POINTS AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. DRAINAGE AREA TO THE MEASURE SHALL BE LIMITED TO NO MORE THAN ONE-HALF ACRE.



PLAN
DRAINAGE STRUCTURE INLET PROTECTION, CONCRETE BLOCK
- TEMPORARY



CROSS SECTION
DRAINAGE STRUCTURE INLET PROTECTION, CONCRETE BLOCK
- TEMPORARY



DRAINAGE STRUCTURE INLET PROTECTION, EXCAVATED
- TEMPORARY

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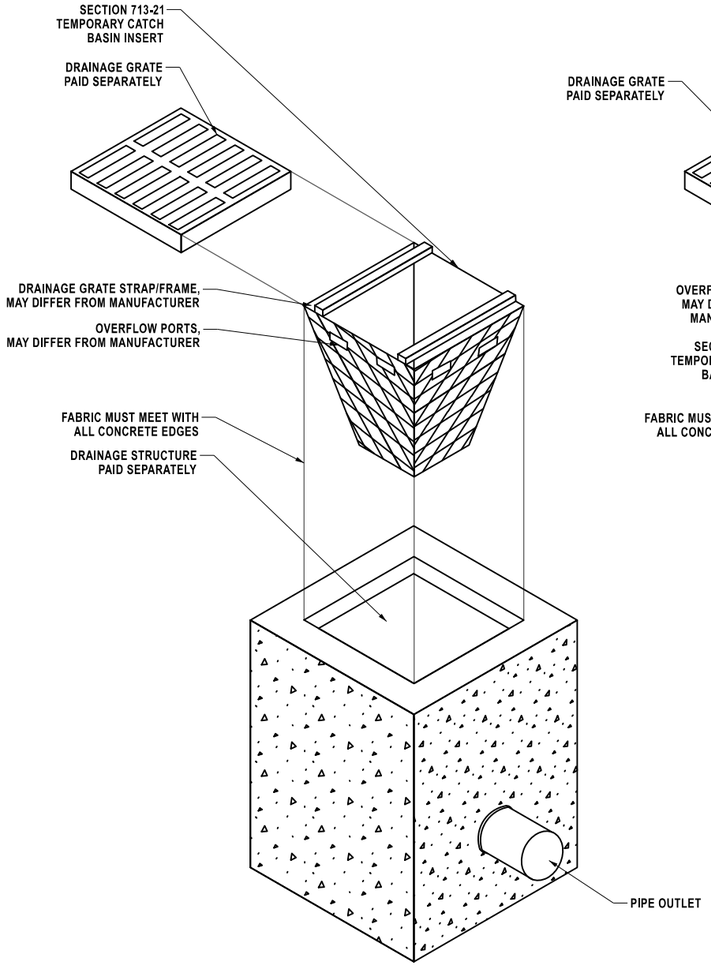
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DRAINAGE STRUCTURE INLET PROTECTION
- TEMPORARY
(SHEET 2 OF 3)

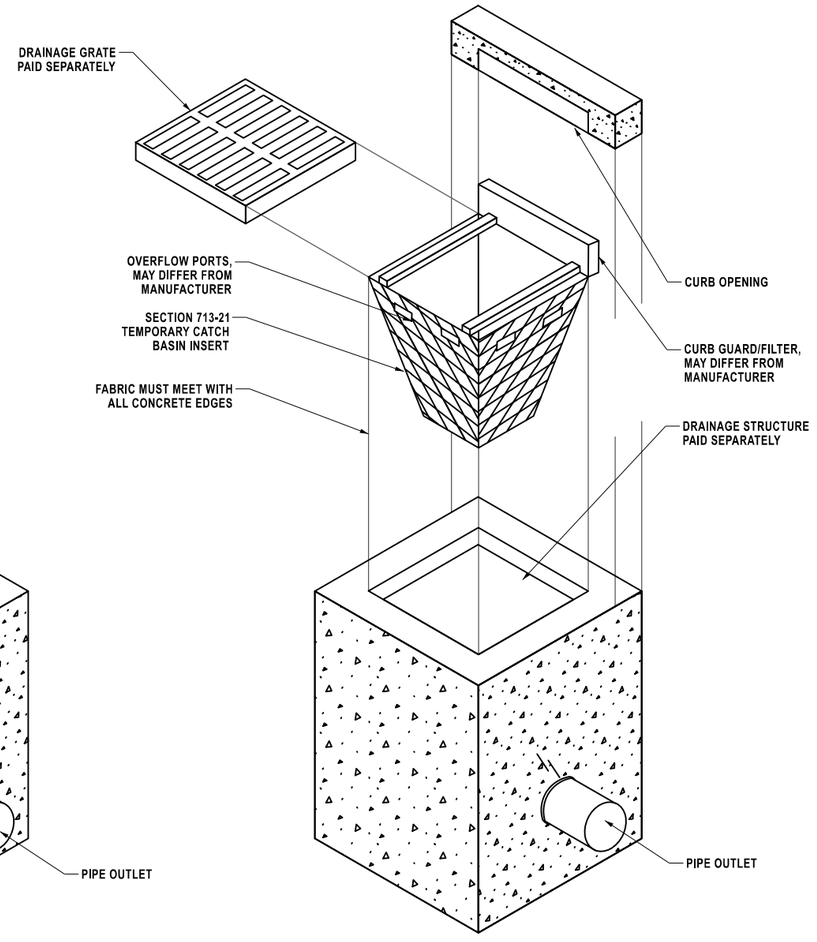
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DRAINAGE STRUCTURE INLET PROTECTION
CATCH BASIN INSERT - TEMPORARY
WITHOUT CURB OPENING



DRAINAGE STRUCTURE INLET PROTECTION
CATCH BASIN INSERT - TEMPORARY
WITH CURB OPENING

GENERAL NOTES FOR CATCH BASIN INSETS:

1. TEMPORARY CATCH BASIN INSERTS SHALL COMPLY WITH SECTION 713-21.

2. REFER TO APPLICATION NOTES FOR DRAINAGE STRUCTURE INLET PROTECTION ON 209-03, SHEET 1 OF 3.

3. REMOVE INSERT ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

4. ALL ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE VICINITY OF THE CATCH BASIN AFTER A RAINFLL EVENT OF 0.50 INCHES OR MORE PER TWENTY-FOUR (24) HOURS PERIOD AND PRIOR TO REMOVAL OF THE INSERT FOR MAINTENANCE.

5. REFER TO THE MANUFACTURER'S INSTRUCTIONS AND THE SPECIFICATION FOR INSTRUCTIONS ON EMPTYING AND REINSTALLING THE CATCH BASIN INSERT. REMOVAL OF TRASH, SEDIMENT AND DEBRIS FROM THE INSERT SHALL BE DONE IN A MANNER THAT ENSURES TRASH, SEDIMENT OR DEBRIS DOES NOT ENTER AN UNPROTECTED CATCH BASIN.

6. IF A CATCH BASIN INSERT'S FABRIC OR STRAPS ARE TORN, DISPOSE OF THE SEDIMENT AND DEBRIS CONTAINED WITHIN THE UNIT ACCORDING TO THESE MAINTENANCE INSTRUCTIONS AND REPLACE THE ENTIRE INSERT UNIT.

7. TRASH, SEDIMENT AND DEBRIS REMOVED FROM THE CATCH BASIN INSERT SHALL BE DISPOSED OF AS SOLID WASTE IN ACCORDANCE WITH NYSDEC PART 360 REGULATIONS.

8. CATCH BASIN INSERTS SHALL BE REMOVED PRIOR TO WINTER SHUTDOWN. RE-INSTALLATION OF THE UNIT(S) SHALL OCCUR PRIOR TO GROUND DISTURBANCE OR THE FIRST THAW IN THE FOLLOWING SPRING, WHICHEVER OCCURS FIRST AND ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

9. FINAL REMOVAL: AS PER SECTION 209-3.01, CATCH BASIN INSERTS SHALL NOT BE REMOVED WITHOUT THE ENGINEER'S APPROVAL. DISPOSAL SHALL BE IN ACCORDANCE WITH SECTION 107-10E CONSTRUCTION AND DEMOLITION DEBRIS. NO EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED UNTIL AFTER ALL SOIL DISTURBANCE AREAS HAVE BEEN FULLY STABILIZED WITH AN ESTABLISHED PERMANENT AND APPROVED VEGETATIVE COVER AT A UNIFORM DENSITY OF EIGHTY (80%).

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U.S. CUSTOMARY STANDARD SHEET

DRAINAGE STRUCTURE INLET PROTECTION
(SHEET 3 OF 3)

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