

ROOM / SPACE FINISH SCHEDULE

ROOM / SPACE NO.	ROOM NAME	BASE	FLOOR	NORTH WALL	WEST WALL	EAST WALL	SOUTH WALL	CEILING	HEIGHT	REMARKS	ROOM / SPACE NO.
101	DEWATERING AREA	---	CONC/SLR	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	ES/PTD	VARIABLES		101
102	OZONE ROOM	---	CONC/SLR	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	CP/PTD	10' - 0"	2-HOUR CONSTRUCTION	102
103	PROCESS TREATMENT AREA	---	CONC/SLR	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	ES/PTD	VARIABLES		103
104	PUMP AREA	---	CONC/SLR	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	ES/PTD	10' - 0"		104
105	KMNO4 ROOM	---	CONC/CRFF	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	CP/PTD	10' - 0"	2-HOUR CONSTRUCTION	105
106	GENERAL STORAGE AREA	---	CONC/SLR	CMU/PTD	CMU/PTD	CMU/PTD	---	ES/PTD	10' - 0"		106
107	MECHANICAL ROOM	---	CONC/SLR	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	ES/PTD	10' - 0"		107
108	KOH AREA	---	CONC/CRFF	CONC/CRWF	CONC/CRWF	CONC/CRWF	CONC/CRWF	ES/PTD	10' - 0"	NOTE: CONC. CONTAINMENT WALLS - 2'-0" (H)	108
109	COAGULANT AREA	---	CONC/CRFF	CONC/CRWF	CONC/CRWF	CONC/CRWF	CONC/CRWF	ES/PTD	10' - 0"	NOTE: CONC. CONTAINMENT WALLS - 2'-0" (H)	109
110	NAOCI AREA	---	CONC/CRFF	CONC/CRWF	CONC/CRWF	CONC/CRWF	CONC/CRWF	ES/PTD	10' - 0"	NOTE: CONC. CONTAINMENT WALLS - 2'-0" (H)	110
111	ADDITIONAL DRY CHEMICAL STORAGE AREA	---	CONC/SLR	---	CONC/PTD	CONC/PTD	CONC/PTD	ES/PTD	10' - 0"		111
112	STAIR	RB	SRF	SF	CMU/PTD/SF	CMU/PTD/SF	CMU/PTD	ES/PTD	VARIABLES		112
201	LABORATORY	RB	SRF	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	MRACT	10' - 0"		201
202	MEETING AREA/BREAK ROOM	RB	SRF	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	MRACT	10' - 0"		202
203	LOCKERS/SHOWER	RB/CT	SRF/CT	CMU/PTD/CT	CMU/PTD/CT	CMU/PTD/CT	CMU/PTD/CT	MRGWB/PTD	10' - 0"		203
204	RESTROOM	CT	CT	CT	CT	CT	CT	MRGWB/PTD	10' - 0"		204
205	JANITOR'S CLOSET	CT	CT	CT	CT	CT	CT	MRGWB/PTD	8' - 0"		205
206	CONTROL ROOM	RB	SRF	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	MRACT	10' - 0"		206
207	ELECTRICAL ROOM	---	CONC/SLR	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	MRGWB/PTD	10' - 0"		207
208	HVAC ROOM	---	CONC/SLR	CMU/PTD	CMU/PTD	CMU/PTD	CMU/PTD	MRGWB/PTD	10' - 0"		208
209	STAIR	RB	SRF	SF	CMU/PTD	CMU/PTD	CMU/PTD	MRGWB/PTD	VARIABLES		209
210	CORRIDOR	RB	SRF	CMU/PTD	---	CMU/PTD	CMU/PTD	MRACT	10' - 0"		210

ABBREVIATIONS:
 ACMU - ACOUSTIC CONCRETE MASONRY UNIT
 CMU - CONCRETE MASONRY UNIT
 CONC - CONCRETE
 CP - CONCRETE PLANK
 CRFF - CHEMICAL RESISTANT FLOOR FINISH
 CRWF - CHEMICAL RESISTANT WALL FINISH
 CT - CERAMIC TILE
 ES - EXPOSED STRUCTURE
 GWB - GYPSUM WALL BOARD
 MRGWB - MOISTURE RESISTANT GYPSUM WALL BOARD
 MRACT - MOISTURE RESISTANT ACOUSTIC TILE
 PTD - PAINTED
 RB - RUBBER BASE
 SF - STOREFRONT
 SLR - SEALER
 SRF - SHEET RUBBER FLOOR

GENERAL NOTES:
 1. ALL EXPOSED STRUCTURAL STEEL SHALL BE PAINTED

Drawing file: C:\Users\jhu\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\79\3\Q4\MSchedules 11-13-15.dwg Plot Date: Nov 17, 2015 12:47pm



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MARK	DATE	DESCRIPTION

Scale	N.T.S.
Date	NOVEMBER 2015
Job No.	200-1501
Designed by	AJD
Drawn by	KMW
Checked by	AJD
Approved by	AJD

THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

NAGOG POND WATER TREATMENT PLANT
 TOWN OF CONCORD, MASSACHUSETTS
 ROOM / SPACE FINISH SCHEDULE

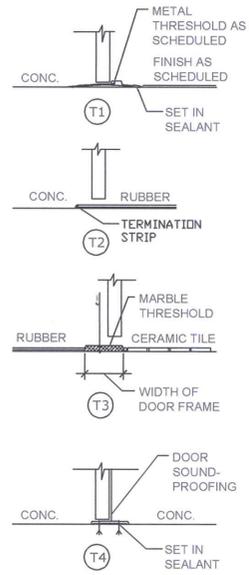
FOR PERMITTING
 Sheet No. **A-4**

DOOR SCHEDULE

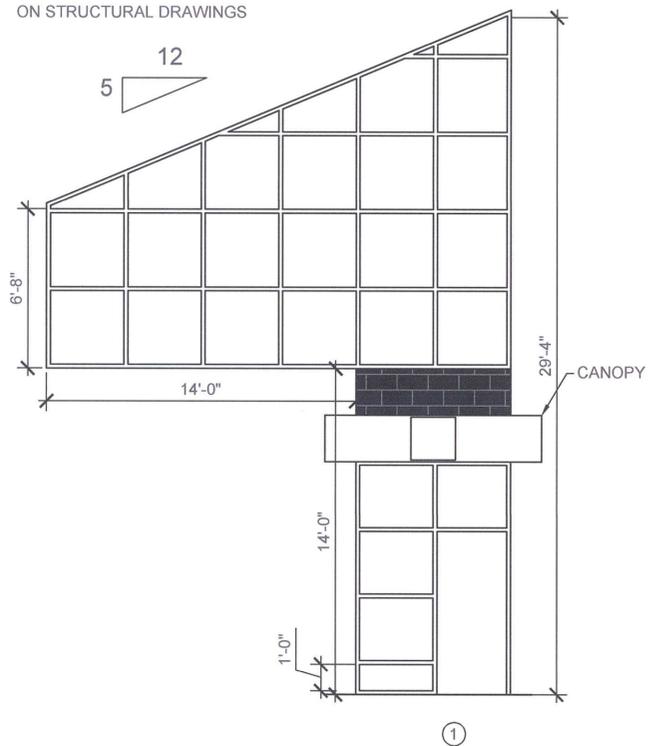
DOOR OPNG. NO.	FRAME											LEAF								UL LABEL	HARDWARE	GLAZING	SIGNAGE	REMARKS	DOOR OPNG. NO.	
	TYPE	M.O. / R.O. W	M.O. / R.O. H	DEPTH	JAMB	JAMB	HEAD	THRESHOLD	MATERIAL	FINISH	COLOR	TYPE	QTY.	W	H	MATERIAL	THICKNESS	FINISH	COLOR							
D1	1	VARIES	VARIES	6"			T1	ALUM	FF	TBS	E	1	3'-0"	8'-0"	ALUM	1-3/4"	FF	TBS			TIG				D1	
D2	2	6'-8"	10'-0"	6"			T2	ALUM	FF	TBS	E	1	3'-0"	8'-0"	ALUM	1-3/4"	FF	TBS			TG				D2	
D3	3	8'-0"	8'-0"	MS				STL	FF	TBS	F	1	8'-0"	8'-0"	STL	2"	FF	TBS		MS	TIG			MOTORIZED INSULATED OHD - 115 SINGLE PHASE	D3	
D4	4	3'-4"	7'-4"	5-3/4"			T4	ALUM	FF	TBS	C	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS					MECHANICAL ROOM		D4	
D5	5	6'-8"	7'-4"	5-3/4"			T4	ALUM	FF	TBS	C	2	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS					KMNO4 ROOM	2 HOUR CONSTRUCTION	D5	
D6	6	6'-8"	10'-8"	5-3/4"			T1	ALUM	FF	TBS	A	1	3'-0"	8'-0"	ALUM	1-3/4"	FF	TBS			TIG				INSULATED DOORS	D6
D7	4	3'-4"	8'-8"	5-3/4"			T1	ALUM	FF	TBS	B	1	3'-0"	8'-4"	ALUM	1-3/4"	FF	TBS							INSULATED DOOR	D7
D8	4	3'-4"	8'-8"	5-3/4"			T1	ALUM	FF	TBS	C	1	3'-0"	8'-4"	ALUM	1-3/4"	FF	TBS							INSULATED DOOR	D8
D9	4	3'-4"	8'-8"	5-3/4"			T1	ALUM	FF	TBS	C	1	8'-0"	8'-4"	ALUM	1-3/4"	FF	TBS							INSULATED DOOR	D9
D10	5	6'-8"	8'-8"	5-3/4"			T4	ALUM	FF	TBS	C	2	3'-0"	8'-4"	ALUM	1-3/4"	FF	TBS					OZONE ROOM	2 HOUR CONSTRUCTION	D10	
D11	4	3'-4"	8'-8"	5-3/4"			T4	ALUM	FF	TBS	B	1	3'-0"	8'-4"	ALUM	1-3/4"	FF	TBS					DEWATERING		INSULATED DOOR	D11
D12	5	6'-8"	8'-8"	5-3/4"			T4	ALUM	FF	TBS	C	2	3'-0"	8'-4"	ALUM	1-3/4"	FF	TBS							INSULATED DOOR	D12
D13	3	14'-0"	14'-0"	MS				STL	FF	TBS	G	1	14'-0"	14'-0"	STL	2"	FF	TBS		MS	TIG				MOTORIZED INSULATED OHD - 115 SINGLE PHASE	D13
D14	6	6'-8"	10'-8"	5-3/4"			T1	ALUM	FF	TBS	A	1	3'-0"	8'-0"	ALUM	1-3/4"	FF	TBS			TIG				INSULATED DOORS	D14
D15	2	6'-8"	10'-0"	6"			T1	ALUM	FF	TBS	E	1	3'-0"	8'-0"	ALUM	1-3/4"	FF	TBS			TG					D15
D16	4	3'-4"	7'-4"	5-3/4"			T2	ALUM	FF	TBS	C	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS					HVAC ROOM			D16
D17	4	3'-4"	7'-4"	5-3/4"				ALUM	FF	TBS	C	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS					ELECTRICAL ROOM			D17
D18	4	3'-4"	7'-4"	5-3/4"				ALUM	FF	TBS	B	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS			TG				CONTROL ROOM	D18
D19	4	3'-4"	7'-4"	5-3/4"				ALUM	FF	TBS	B	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS			TG				LABORATORY	D19
D20	4	3'-4"	7'-4"	5-3/4"				ALUM	FF	TBS	B	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS			TG				BREAK ROOM	D20
D21	4	3'-4"	7'-4"	5-3/4"			T3	ALUM	FF	TBS	C	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS							JANITOR'S CLOSET	D21
D22	4	3'-4"	7'-4"	5-3/4"			T3	ALUM	FF	TBS	C	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS							RESTROOM	D22
D23	4	3'-4"	7'-4"	5-3/4"				ALUM	FF	TBS	C	1	3'-0"	7'-0"	ALUM	1-3/4"	FF	TBS							LOCKER ROOM	D23

ABBREVIATIONS :
 ALUM - ALUMINUM
 FF - FACTORY FINISH
 MS - MANUFACTURER'S STANDARD
 OHD - OVERHEAD DOOR
 PTD - PAINTED
 STL - STEEL
 TBS - TO BE SELECTED
 TG - 1/4" TEMPERED GLASS
 TIG - 1" TEMPERED INSULATED GLASS
 WGL - 1/4" WIRE GLASS

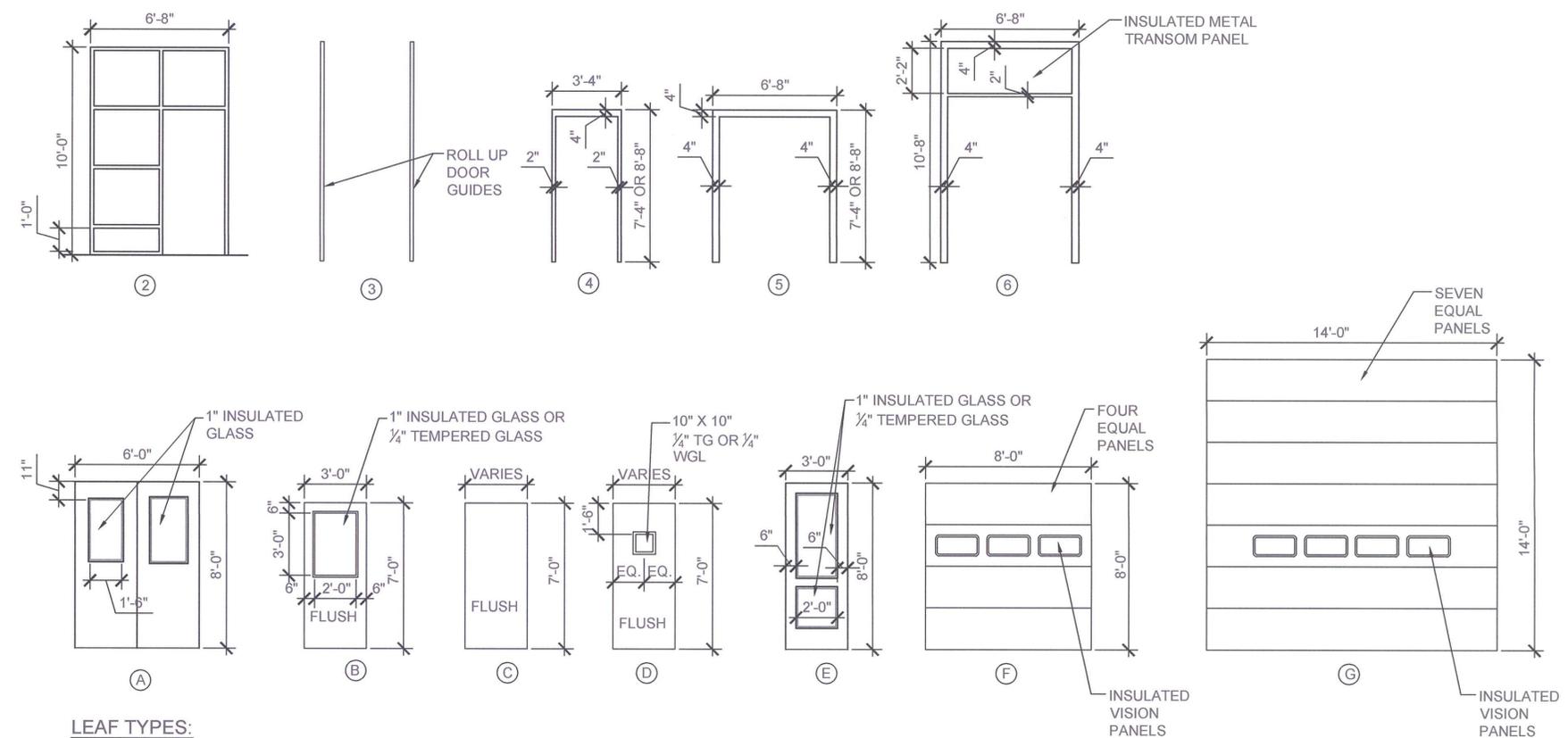
GENERAL NOTES
 1. ALL EXTERIOR AND INTERIOR CMU DOOR WALL OPENINGS TO RECEIVE CMU LINTEL BLOCKS, 8" BEARING AT EACH END OK AS OTHERWISE NOTED ON STRUCTURAL DRAWINGS



THRESHOLDS:



FRAME TYPES:



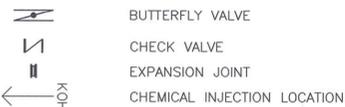
LEAF TYPES:

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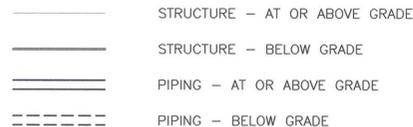
<p>Environmental Partners GROUP A partnership for engineering solutions.</p>	<p>DiMarinisi & Wolfe ARCHITECTS • URBAN DESIGNERS BOSTON, MASSACHUSETTS</p>		Scale	N.T.S.	THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING	NAGOG POND WATER TREATMENT PLANT TOWN OF CONCORD, MASSACHUSETTS DOOR SCHEDULE	FOR PERMITTING
			Date	NOVEMBER 2015			Sheet No.
Job No.	200-1501						
Designed by	AJD						
Drawn by	KMW						
Checked by	AJD						
Approved by	AJD						
MARK	DATE	DESCRIPTION					

MECHANICAL PROCESS LEGEND

VALVES, COUPLING, & APPURTENANCES

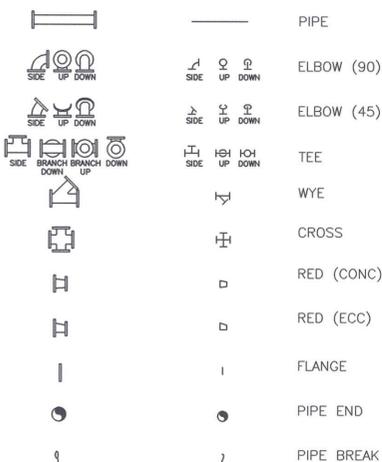


LINETYPE LEGEND



PIPE AND FITTINGS

DOUBLE LINE SINGLE LINE



PIPE AND FITTING SYMBOLY SHOWN ABOVE IS FOR FLANGED DUCTILE IRON PIPE. SYMBOLY FOR OTHER PIPING SYSTEMS IS SIMILAR. END CONNECTIONS DENOTE JOINING TECHNOLOGY.

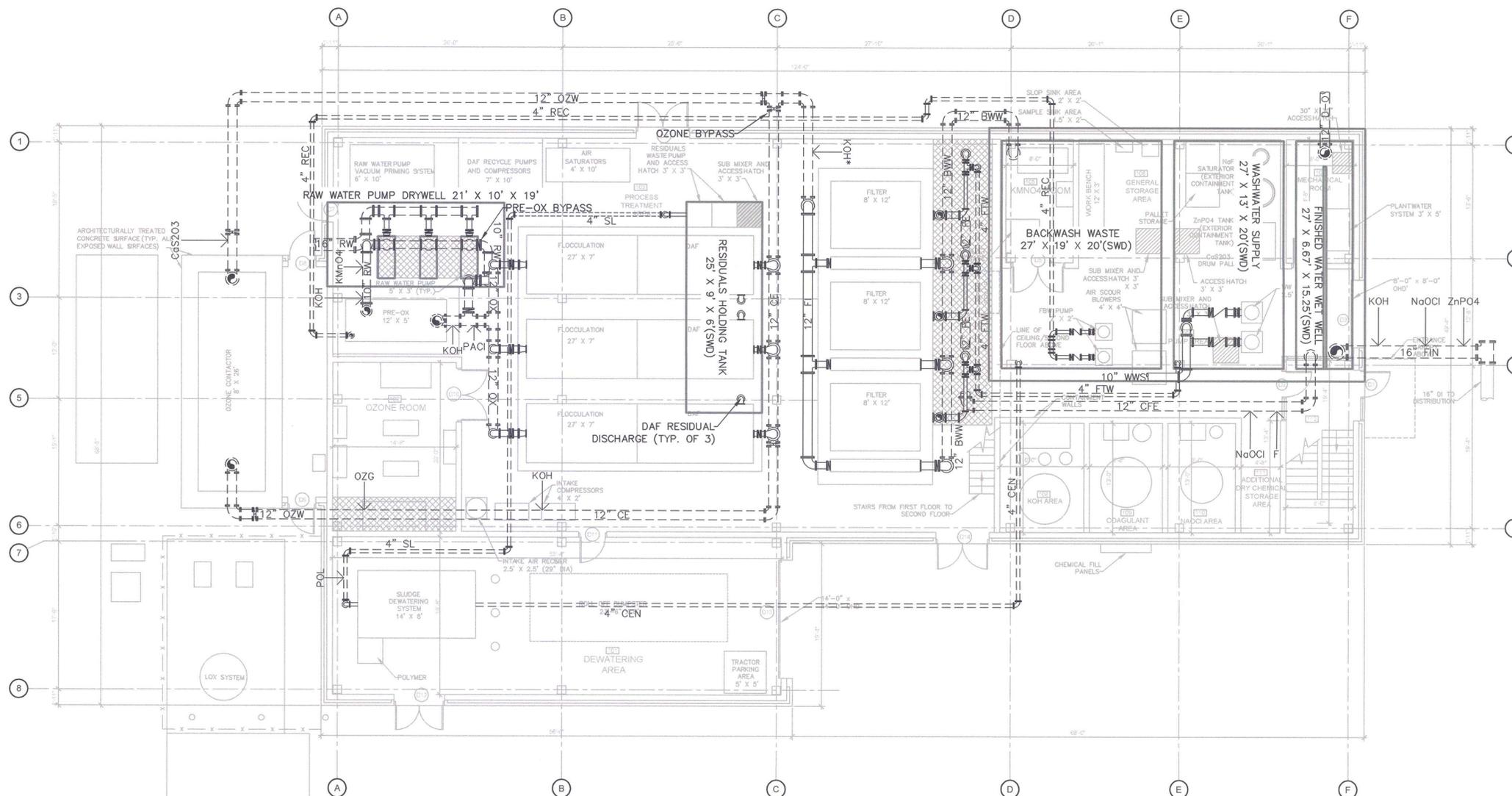


PROCESS STREAM ABBREVIATIONS

- AS AIR SCOUR
- BWA BACKWASH AIR
- BW BACKWASH WASTE
- CaS2O3 CALCIUM THIOSULFATE
- CE CLARIFIER EFFLUENT
- CEN CENTRATE
- CFE COMBINED FILTER EFFLUENT
- D-O DRAIN, OVERFLOW
- DAF DISSOLVED AIR FLOTATION
- DAFR DAF RECYCLE
- DR DRAIN
- F FLUORIDE
- FE FILTER EFFLUENT
- FI FILTER INFLUENT
- FTW FILTER TO WASTE
- FIN FINISHED WATER
- KMnO4 POTASSIUM PERMANGANATE
- KOH POTASSIUM HYDROXIDE
- LOX LIQUID OXYGEN
- NaOCl SODIUM HYPOCHLORITE
- OZG OZONE GAS
- OZO OZONE OFF GAS
- OZW OZONATED WATER
- PACl POLYALUMINUM CHLORIDE
- POL POLYMER
- PRE-OX PER-OXIDATION
- PSW PLANT SERVICE WATER
- REC RECYCLE
- RW RAW WATER
- SL SLUDGE
- SWD SIDEWATER DEPTH
- V VENT
- VG VENT GAS
- W1 POTABLE WATER
- W2 NON-POTABLE WATER
- WWS WASH WATER SUPPLY
- ZnPO4 ZINC ORTHOPHOSPHATE

NOTES:

1. *PRE-FILTRATION KOH ONLY USED DURING OZONE SYSTEM BYPASS.



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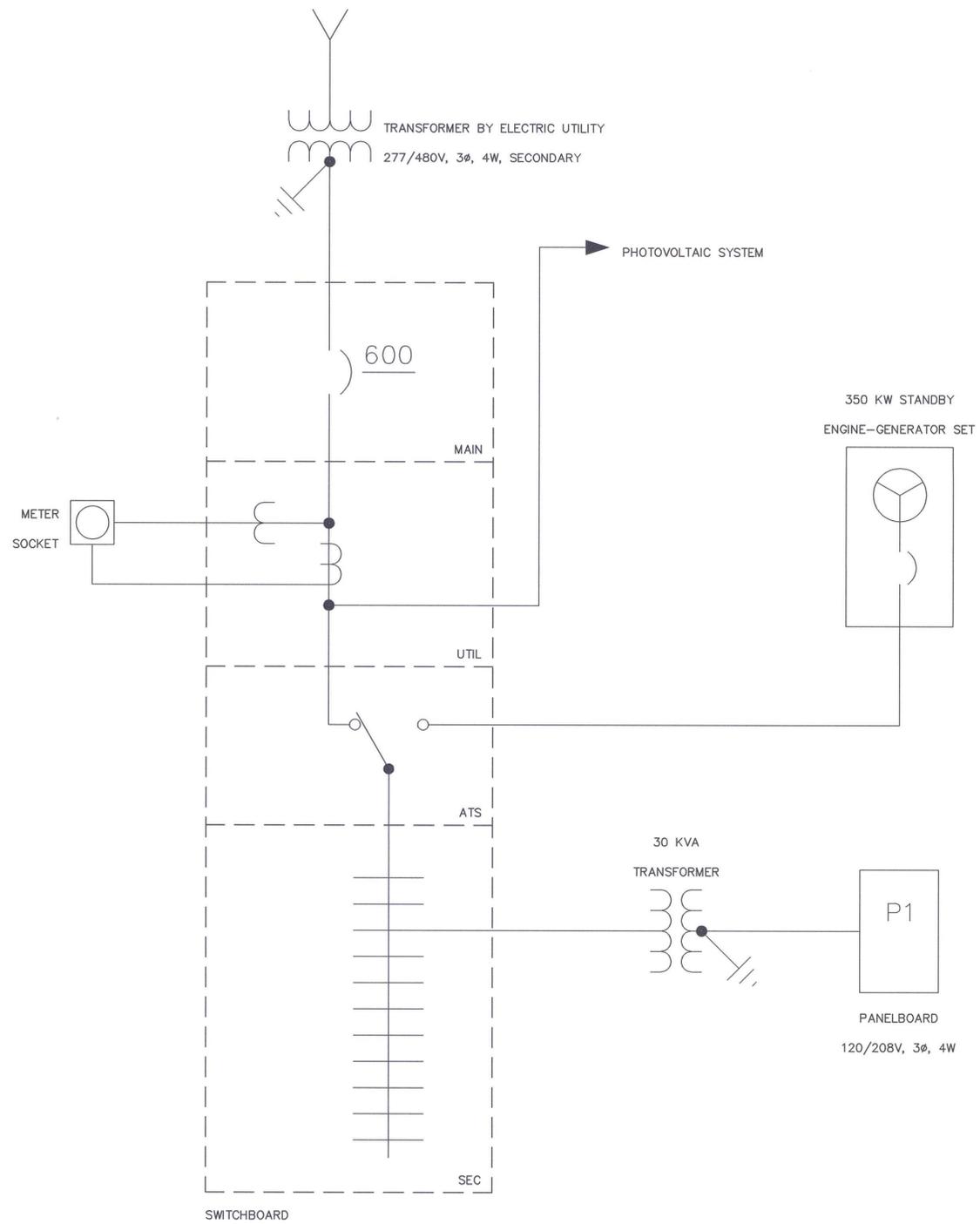
MARK	DATE	DESCRIPTION

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Date	NOVEMBER 2015
Job No.	200-1501
Designed by	DNRP
Drawn by	NJR
Checked by	DNRP
Approved by	SCO

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NAGOG POND WATER TREATMENT PLANT
TOWN OF CONCORD, MASSACHUSETTS
PROCESS MECHANICAL PIPING PLAN

FOR PERMITTING
Sheet No.
M-1



PRELIMINARY SINGLE LINE DIAGRAM



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MARK	DATE	DESCRIPTION

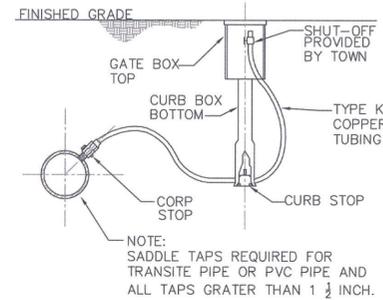
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Date	NOVEMBER 2015
Job No.	200-1501
Designed by	EBM, INC
Drawn by	EBM, INC
Checked by	DNRP
Approved by	SCO

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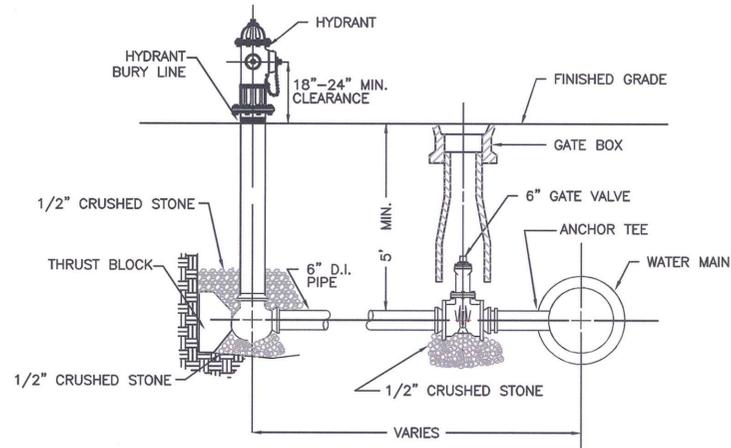
NAGOG POND WATER TREATMENT PLANT
TOWN OF CONCORD, MASSACHUSETTS

SINGLE LINE DIAGRAM

FOR PERMITTING
Sheet No.
E-1



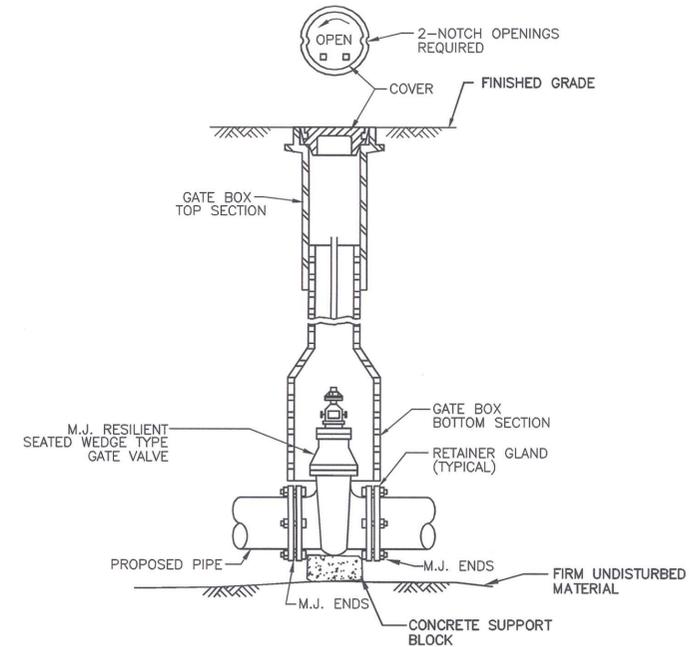
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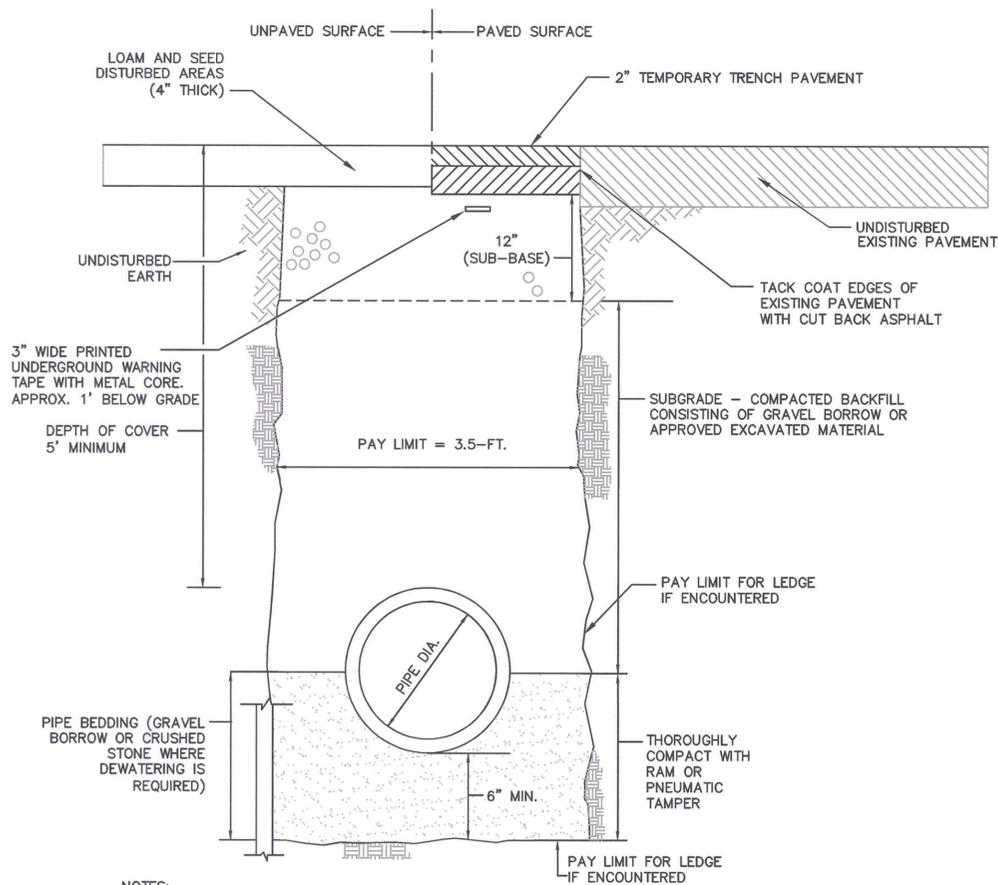
NOTES:

1. ALL HYDRANT, VALVE AND TEE JOINTS TO BE RESTRAINED MECHANICAL JOINTS.
2. DEPTH OF HYDRANT BURY SHALL SUIT INSTALLED DEPTH OF COVER OVER WATERMAIN. INSTALL RISERS AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
3. VALVES SHALL OPEN LEFT (COUNTER-CLOCKWISE).

HYDRANT ASSEMBLY DETAIL
N.T.S.



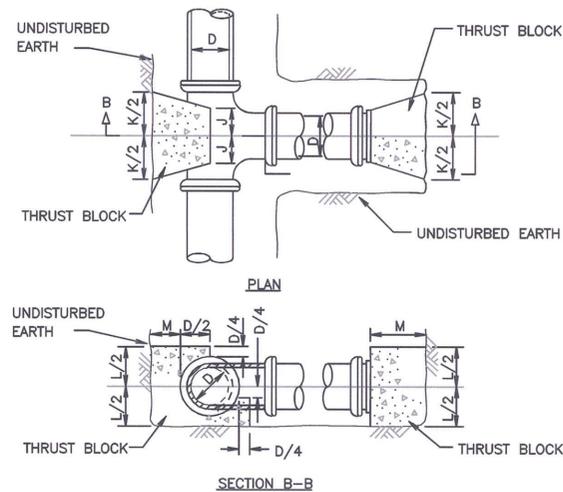
GATE VALVE AND VALVE BOX DETAIL
N.T.S.



NOTES:

1. ANY GRASS AREAS DISTURBED SHALL BE GRADED, LOAMED TO A DEPTH OF 4 INCHES AND SEEDED, WHERE NO GRASS OCCURS USE 6" PROCESSED GRAVEL.

TYPICAL WATER MAIN TRENCH DETAIL
N.T.S.

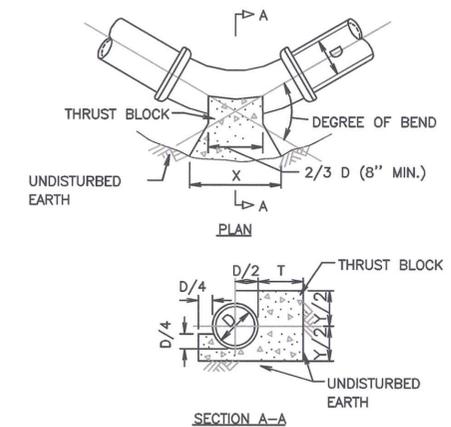


NOTES:

1. ALL CONCRETE SHALL BE 3000 PSI @ 28 DAYS (CLASS 'A' CONCRETE).
2. DIMENSIONS SHOWN ARE MINIMUM AND ARE BASED UPON SOIL PRESSURE OF 1500 PSF AND TOTAL PRESSURE OF 250 PSI. TOTAL PRESSURE IS WORKING PRESSURE PLUS SURGE PRESSURE.
3. THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH.

TABLE OF DIMENSIONS						
D (in)	4	6	8	10	12	14
J (in)	6	6	7	9	10	12
K (in)	16	16	20	26	32	36
L (in)	16	16	21	24	29	34
M (in)	11	11	14	16	19	22

CONCRETE THRUST BLOCK DETAIL AT TEE/PLUG
N.T.S.



NOTES:

1. ALL CONCRETE SHALL BE 3000 P.S.I. @ 28 DAYS (CLASS "A" CONCRETE)
2. DIMENSIONS SHOWN ARE MINIMUM AND ARE BASED UPON SOIL PRESSURE OF 1500 P.S.F. AND TOTAL PRESSURE OF 250 P.S.I. TOTAL PRESSURE IS WORKING PRESSURE PLUS SURGE PRESSURE.
3. THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH.

TABLE OF DIMENSIONS																				
DIMENSION	90° BEND					45° BEND					22 1/2° BEND					11 1/4° BEND				
D (in.)	4	6	8	10	12	4	6	8	10	12	4	6	8	10	12	4	6	8	10	12
X (in.)	35	35	50	56	72	80	24	24	35	45	51	60	28	28	30	32	37	42	12	12
Y (in.)	20	20	24	32	35	40	16	16	19	21	27	33	13	13	13	16	19	22	8	8
T (in.)	11	11	14	16	19	22	11	11	14	16	19	22	11	11	13	16	19	22	11	11

CONCRETE THRUST BLOCK DETAIL AT BEND
N.T.S.

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MARK	DATE	DESCRIPTION

Scale	AS SHOWN
Date	NOVEMBER 2015
Job No.	200-1501
Designed by	XXX
Drawn by	XXX
Checked by	SCO
Approved by	SCO

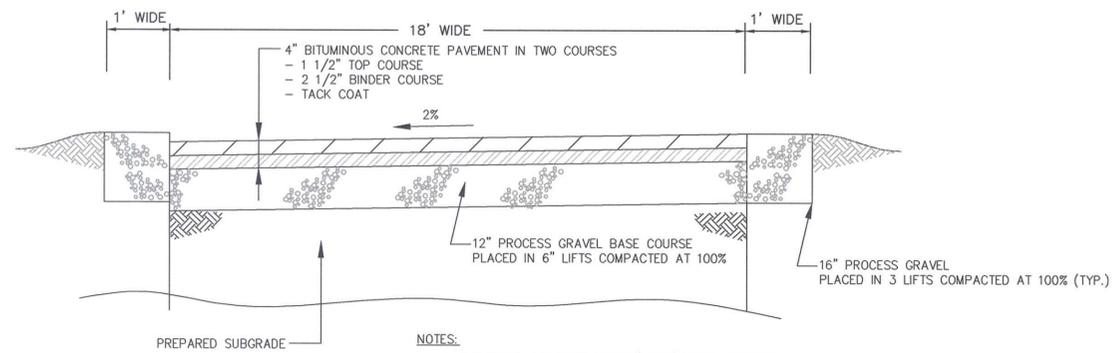
THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

NAGOG POND WATER TREATMENT PLANT
TOWN OF CONCORD, MASSACHUSETTS

CIVIL DETAILS I

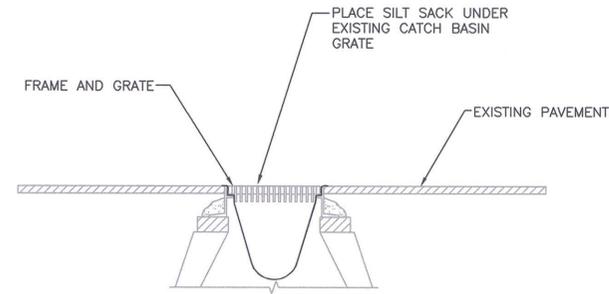
FOR PERMITTING
Sheet No.

CD-1



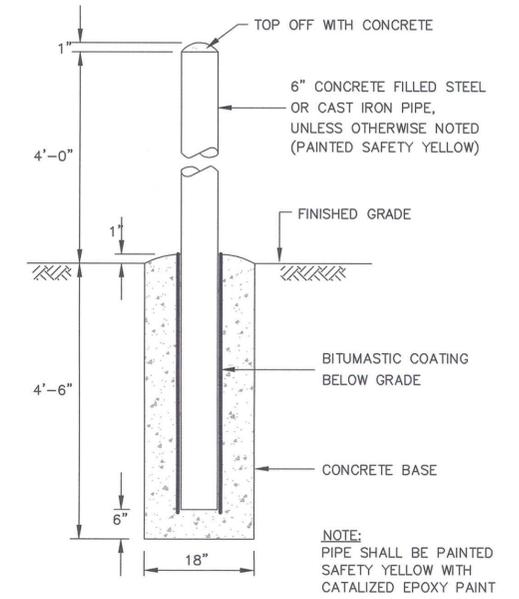
ACCESS ROAD PAVING DETAIL
N.T.S.

- NOTES:
- SUBGRADE-COMPACT TOP 12" IN 6" LIFTS AT 100%.
 - SUBGRADE-COMPACT FILL BELOW TOP 12" IN 6" LIFTS AT 95%.



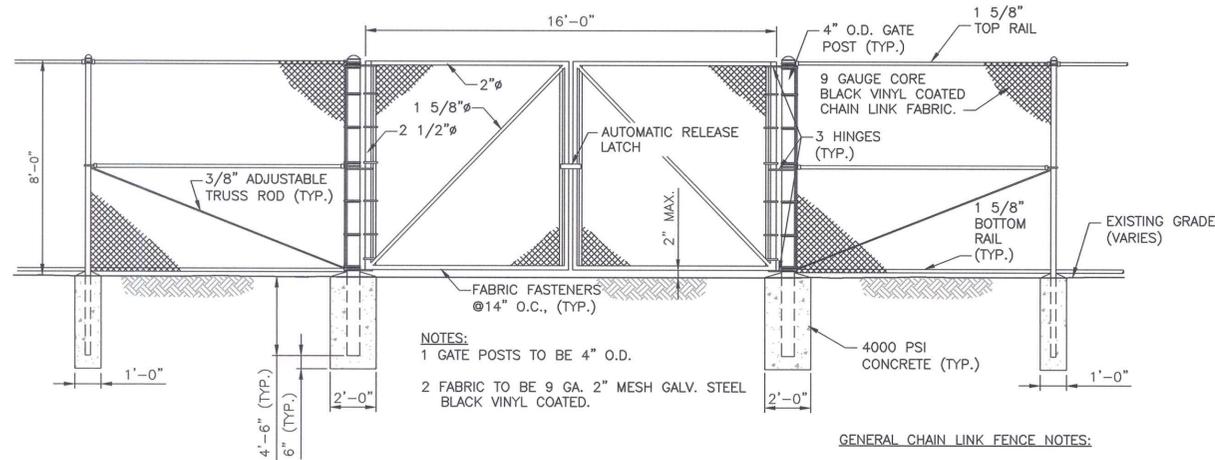
- NOTES:
- SILT SACKS SHALL BE INSPECTED WEEKLY AND ACCUMULATED SILT REMOVED TO ALLOW CATCH BASIN TO FUNCTION PROPERLY.
 - SILT SACK AS MANUFACTURED BY ACF ENVIRONMENTAL (800-448-3636) OR APPROVED EQUAL.

SEDIMENTATION CONTROL AT CATCH BASINS, SILT SACKS
N.T.S.



CONCRETE BOLLARD DETAIL
N.T.S.

NOTE:
PIPE SHALL BE PAINTED SAFETY YELLOW WITH CATALYZED EPOXY PAINT

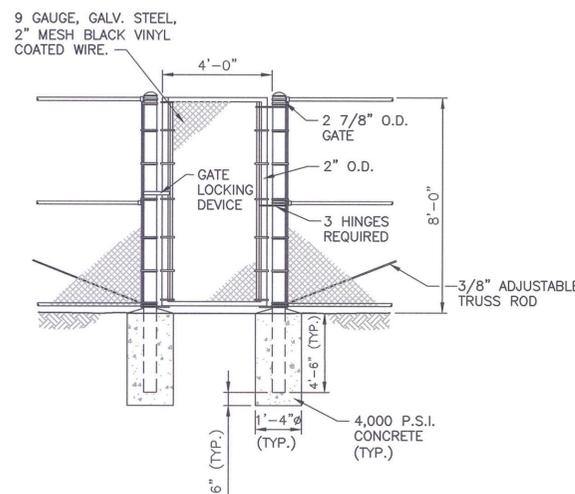


8' WIDE DOUBLE SWING GATE
N.T.S.

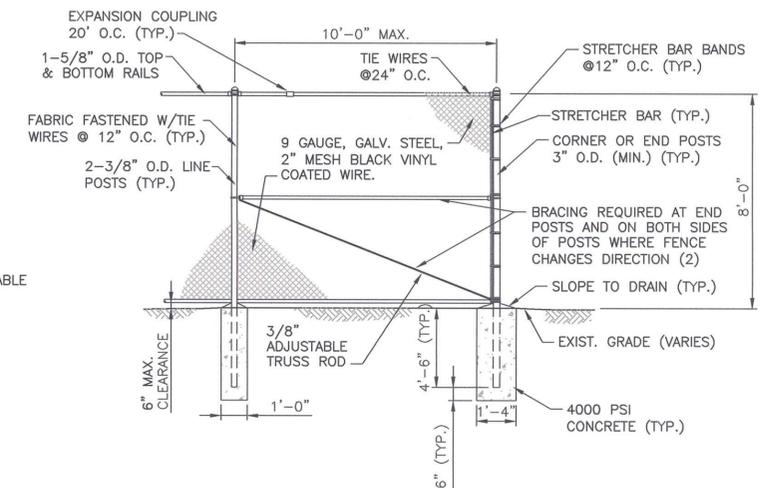
- NOTES:
- GATE POSTS TO BE 4" O.D.
 - FABRIC TO BE 9 GA. 2" MESH GALV. STEEL BLACK VINYL COATED.

GENERAL CHAIN LINK FENCE NOTES:

- ALL CHAINLINK FENCE FABRIC TO BE KNUCKLED (TOP AND BOTTOM).
- ALL CHAIN LINK FENCE POSTS, FABRIC, TIES AND MATERIALS SHALL BE BLACK VINYL COATED.
- ALL SECTIONS INCLUDE BOTTOM RAIL.
- BOTTOM RAIL TO BE 6" FROM FINISHED GRADE IN PV AREA AND 2" FROM FINISHED GRADE IN ALL OTHER AREAS.



4' WIDE PEDESTRIAN GATE
N.T.S.



8' HIGH FENCE DETAIL
N.T.S.

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Date	NOVEMBER 2015
Job No.	200-1501
Designed by	XXX
Drawn by	XXX
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Approved by	SCO

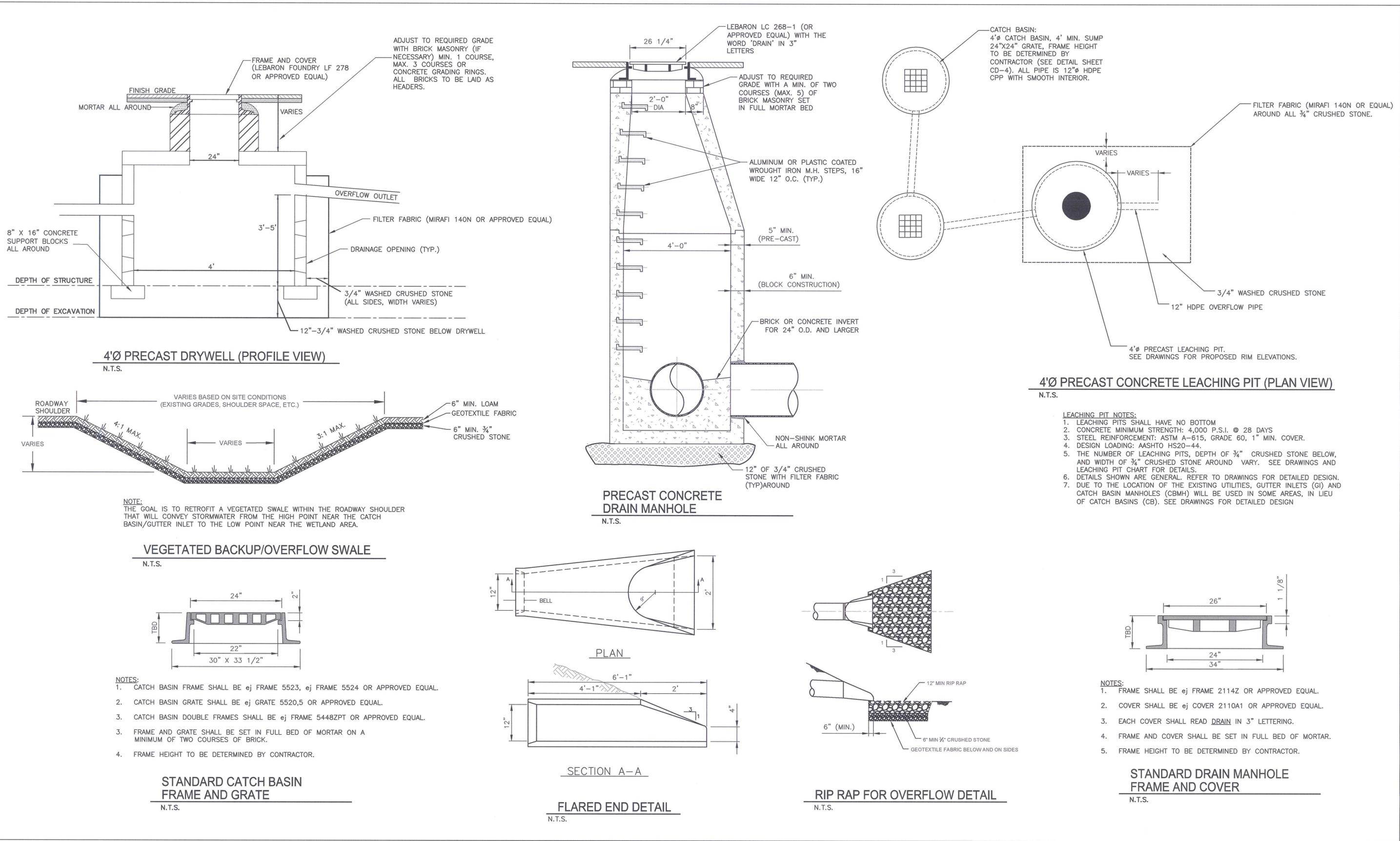
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NAGOG POND WATER TREATMENT PLANT
TOWN OF CONCORD, MASSACHUSETTS

CIVIL DETAILS II

FOR PERMITTING
Sheet No.

CD-2



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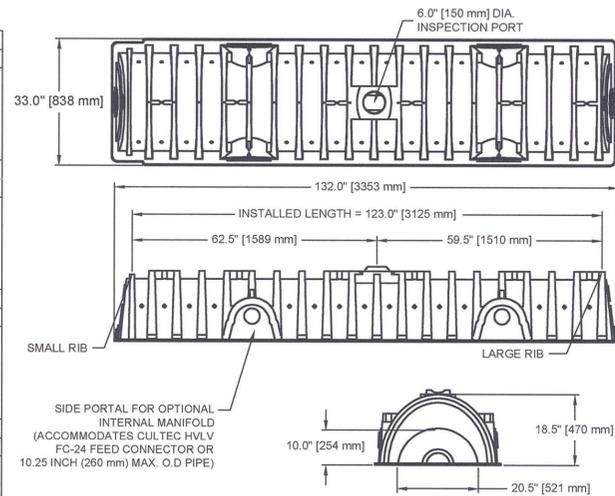
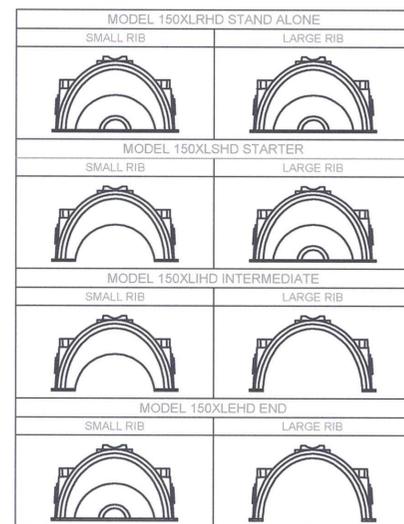
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NAGOG POND WATER TREATMENT PLANT
TOWN OF CONCORD, MASSACHUSETTS

CIVIL DETAILS III

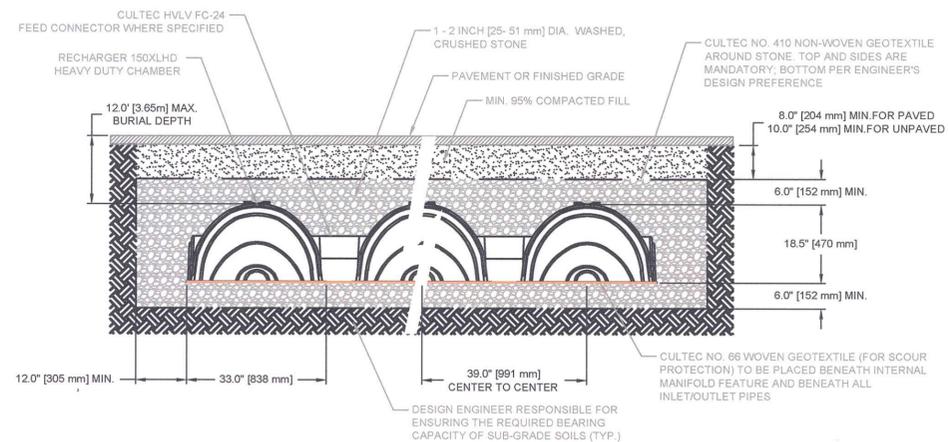
FOR PERMITTING
Sheet No.

CD-3



CULTEC RECHARGER 150XLHD CHAMBER STORAGE = 2.65 CF/FT [0.245 m³/m]
 INSTALLED LENGTH ADJUSTMENT = 0.75' [0.23 m]
 ALL RECHARGER 150XLHD HEAVY-DUTY UNITS ARE MARKED WITH A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
 SIDE PORTAL ACCEPTS CULTEC HVLV FC-24 FEED CONNECTOR OR 10.25 INCH (260 mm) MAX. O.D PIPE

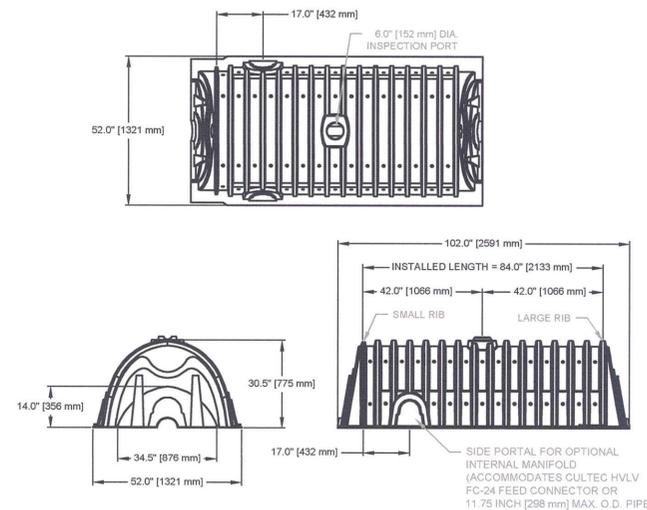
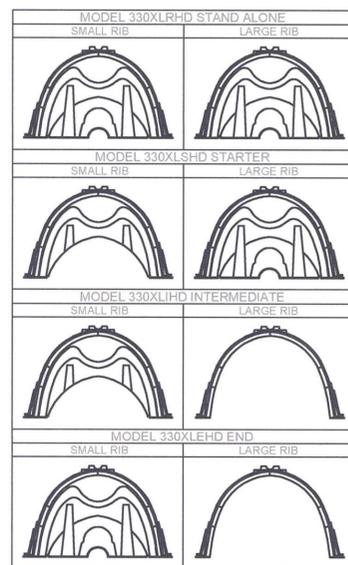
CULTEC RECHARGER 150XLHD HEAVY DUTY THREE VIEW
 N.T.S.



GENERAL NOTES
 RECHARGER 150XLHD BY CULTEC, INC. OF BROOKFIELD, CT. STORAGE PROVIDED = 4.89 CF/FT (0.45 m³/m) PER DESIGN UNIT. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12' (3.65m). THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

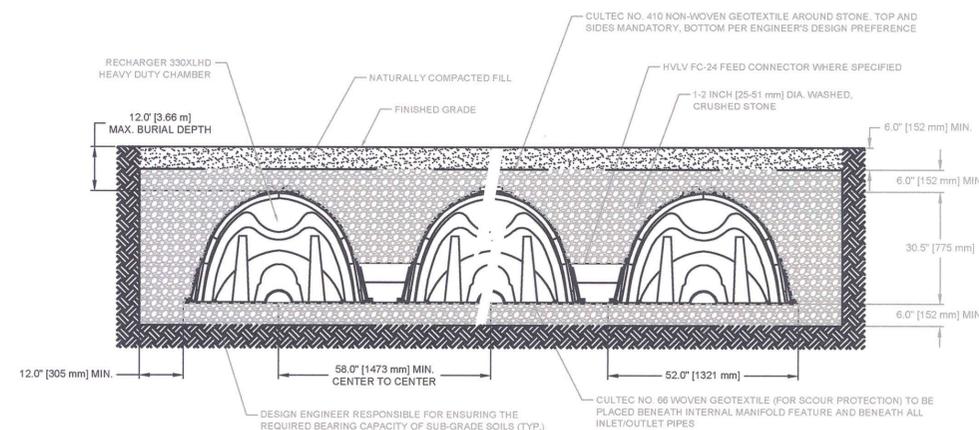
ALL RECHARGER 150XLHD HEAVY DUTY UNITS ARE MARKED WITH A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
 ALL RECHARGER 150XLHD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL CROSS SECTION
 N.T.S.



CULTEC RECHARGER 330XLHD CHAMBER STORAGE = 7.459 CF/FT [0.693 m³/m]
 INSTALLED LENGTH ADJUSTMENT = 1.5' [0.46 m]
 SIDE PORTAL ACCEPTS CULTEC HVLV FC-24 FEED CONNECTOR

CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL THREE VIEW
 N.T.S.



GENERAL NOTES
 RECHARGER 330XL HD BY CULTEC, INC. OF BROOKFIELD, CT. STORAGE PROVIDED = 11.32 CF/FT [1.05 m³/m] PER DESIGN UNIT. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS

ALL RECHARGER 330XL HD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
 ALL RECHARGER 330XL HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS

CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL CROSS SECTION
 N.T.S.

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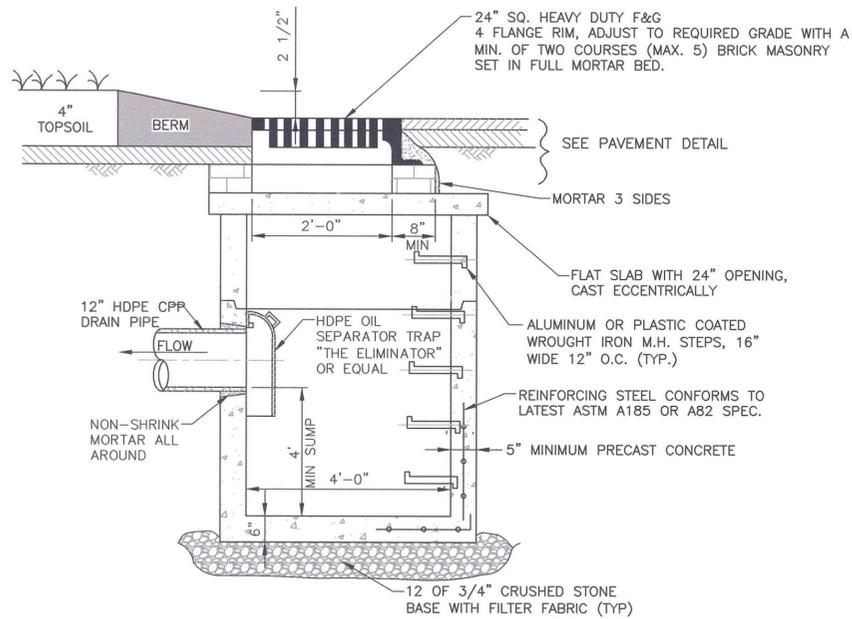
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NAGOG POND WATER TREATMENT PLANT
 TOWN OF CONCORD, MASSACHUSETTS
 CIVIL DETAILS IV

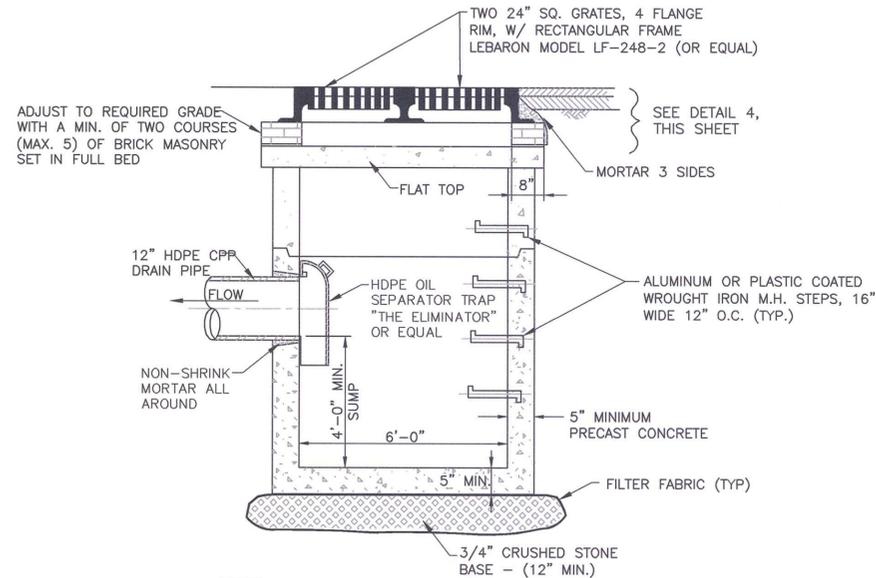
FOR PERMITTING
 Sheet No.
CD-4



- NOTES:**
1. MANHOLE DESIGN TO CONFORM TO LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
 2. USE SPECIAL 4" F&G WHERE REQUIRED.

PRECAST CONCRETE CATCH BASIN / CB MANHOLE

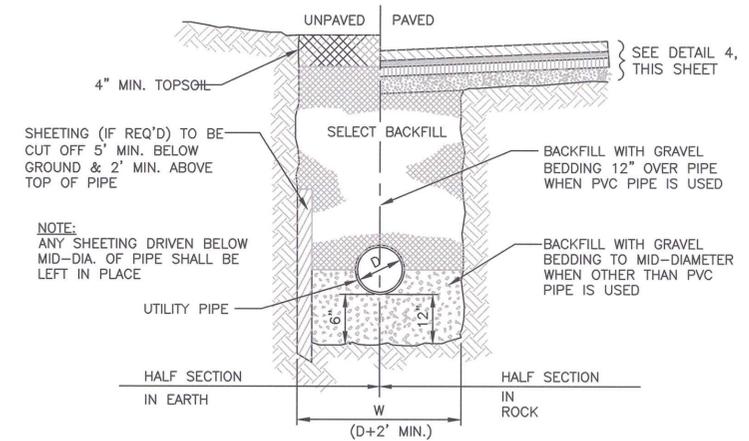
N.T.S.



- NOTES:**
1. MANHOLE DESIGN TO CONFORM TO LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
 2. USE SPECIAL 4" F&G WHERE REQUIRED.

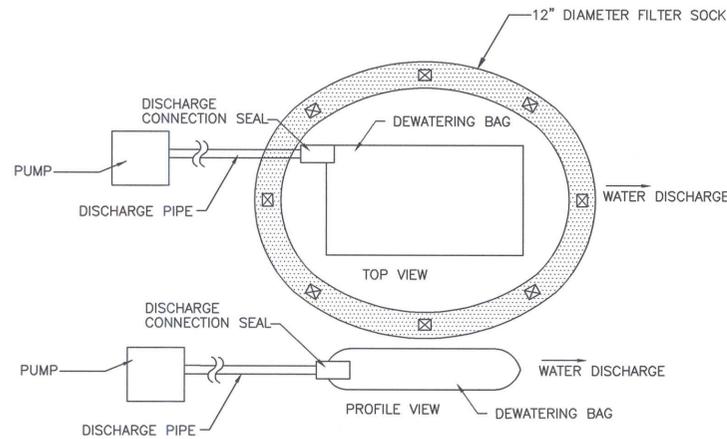
PRECAST CONCRETE DOUBLE CATCH BASIN

N.T.S.



TYPICAL DRAIN UTILITY TRENCH

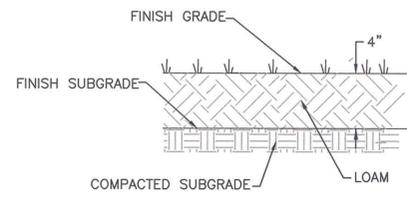
N.T.S.



- NOTES:**
1. DEWATERING BAG SIZE AND QUANTITY SHALL BE AS NEEDED TO ADEQUATELY FILTER ALL PUMP EFFLUENT FROM DEWATERING ACTIVITIES. CONTRACTOR SHALL PROVIDE A REDUNDANT BAG ON SITE AT ALL TIMES.
 2. EACH BAG SHALL HANDLE A 2", 3", OR 4" DISCHARGE HOSE.
 3. DISCHARGE HOSES CAN BE PLACED ALONG ANY EDGE BY MAKING A SMALL INCISION INTO THE FABRIC, INSERTING THE HOSE, AND THEN CLAMPING THE FABRIC TO THE HOSE VIA WIRE, TIES, CLAMP, ROPE OR SIMILAR TO CREATE A GOOD SEAL.
 4. CONTRACTOR SHALL AVOID DISCHARGING MULTIPLE PIPES INTO ONE BAG.

DEWATERING BAGS

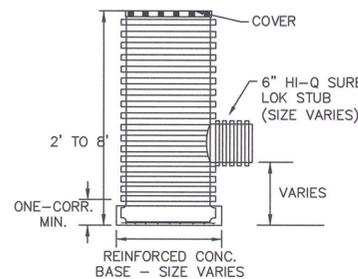
N.T.S.



- NOTE:**
- INSTALL CURLEX I EROSION CONTROL BLANKET AS MANUFACTURED BY AMERICAN EXCELSIOR COMPANY (OR APPROVED EQUAL) ON ALL LOAM AND SEED SLOPES 3:1 OR STEEPER.

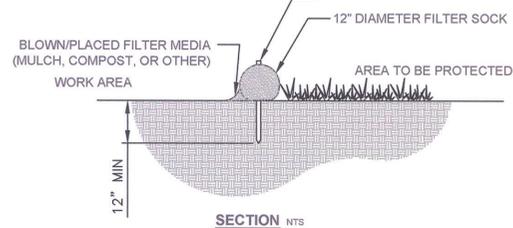
LOAM AND SEED (DISTURBED AREAS)

N.T.S.

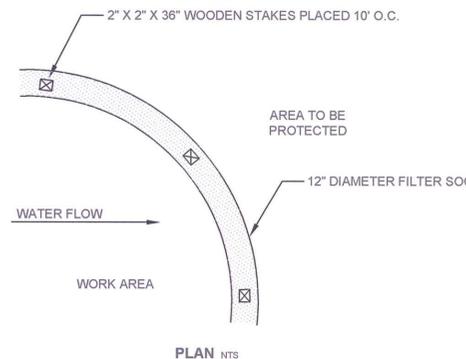


ROOF DRAIN ACCESS CLEANOUT

N.T.S.



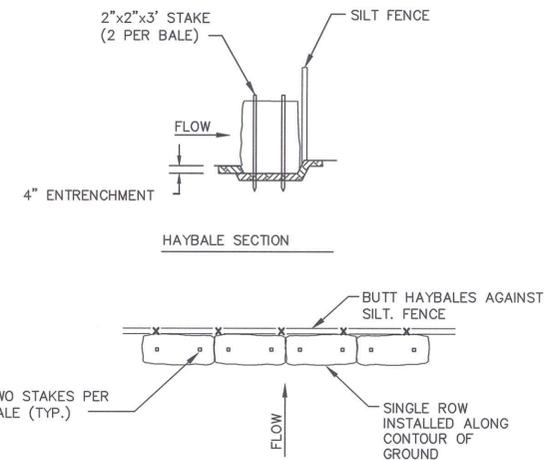
SECTION N.T.S.



PLAN N.T.S.

12" DIAMETER FILTER SOCK

N.T.S.



PLAN VIEW

NOTES:

1. BALES SHALL BE PLACED IN A ROW WITH THE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES DRIVEN THROUGH THE BALES. THE FIRST WOODEN STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED AND REPLACED WHEN THEY BECOME FILLED WITH SEDIMENT AND BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. BALES SHALL BE REMOVED WHEN THE EMBANKMENTS STABILIZE.

HAY BALES AND SILT FENCE DETAIL

N.T.S.

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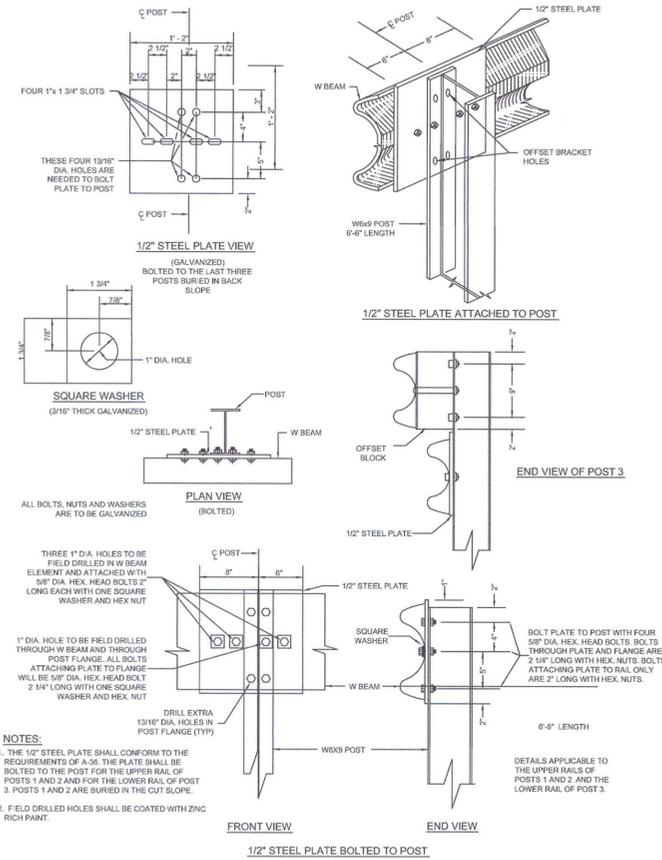
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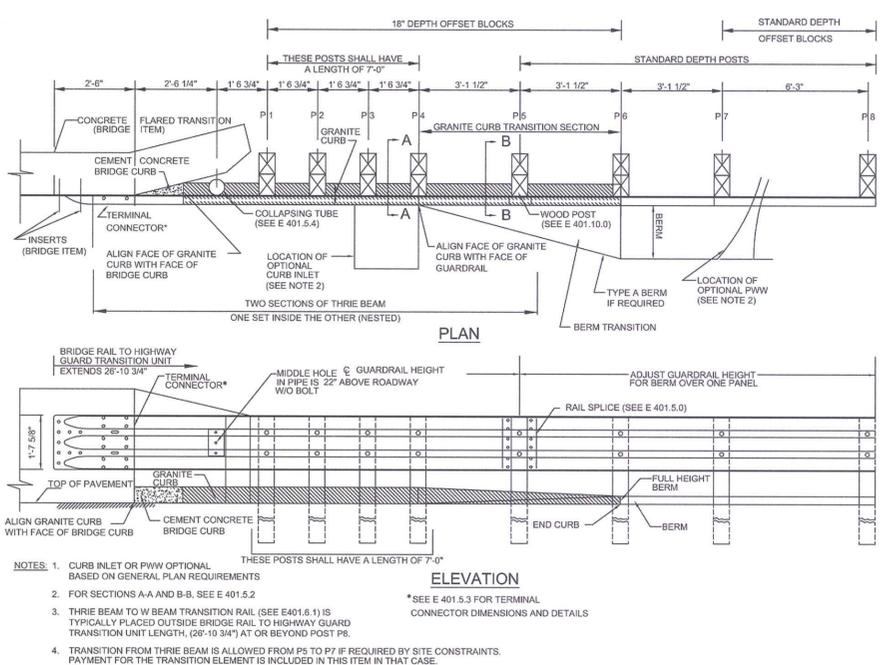
CIVIL DETAILS V

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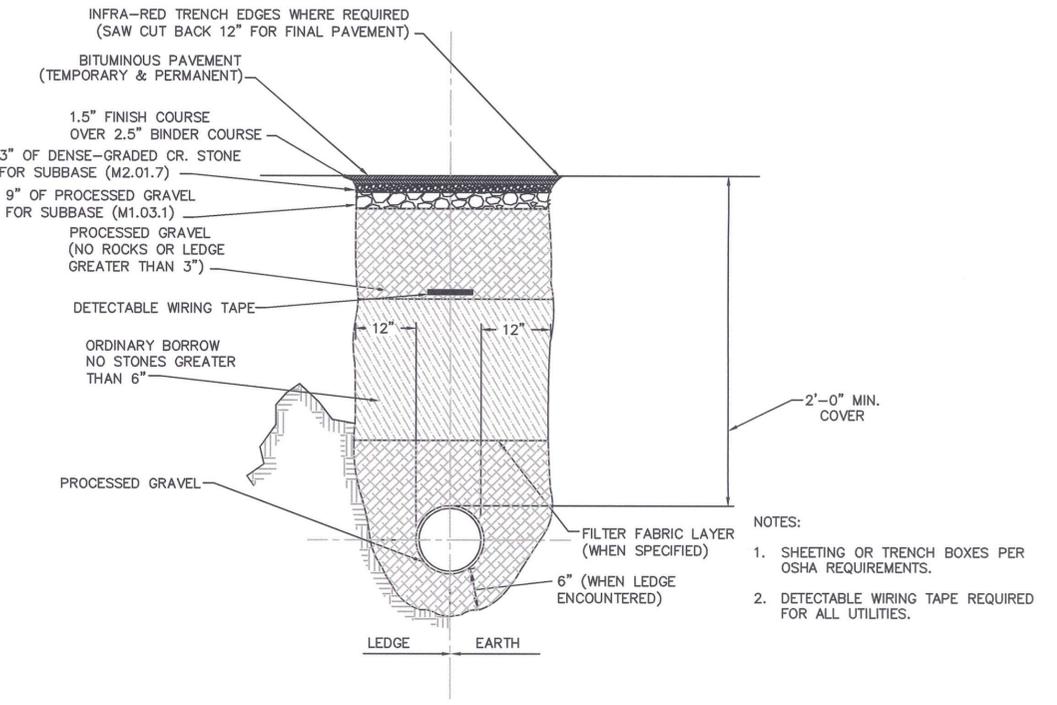
CD-5



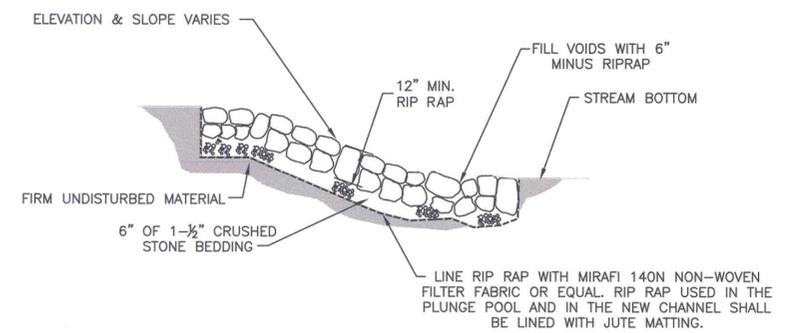
MASSDOT STANDARD GUARDRAIL DETAILS
N.T.S.



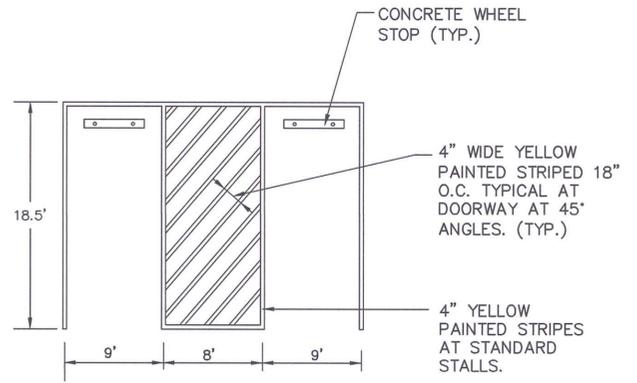
MASSDOT STANDARD GUARDRAIL PROFILE VIEW
N.T.S.



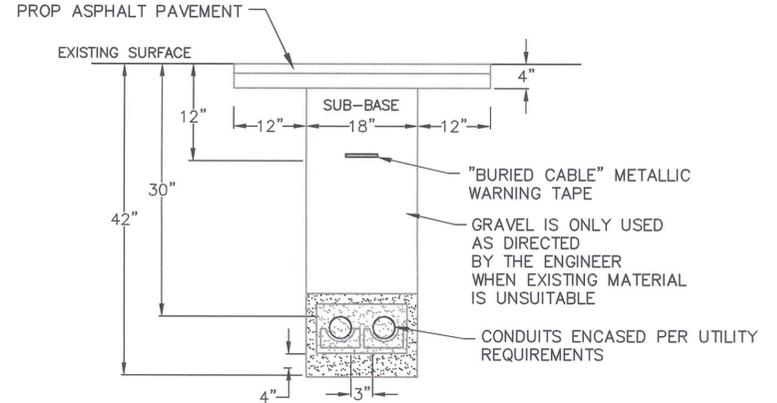
TYPICAL GAS TRENCH DETAIL
N.T.S.



RIP RAP DETAIL
N.T.S.



PARKING SPOT SPACING
N.T.S.



ELECTRIC/CABLE CONDUIT DETAIL
N.T.S.

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NAGOG POND WATER TREATMENT PLANT
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CIVIL DETAILS VI

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CD-6

