

DESIGN PACKAGE (DP) #1 - PROCESS SUBMITTAL

Draft

**Onondaga Lake Remedial Design
SCA Water Treatment Plant**

Prepared for:

Honeywell

March 2010

DESIGN PACKAGE (DP) #1 - PROCESS SUBMITTAL

Onondaga Lake Remedial Design SCA Water Treatment Plant

Prepared for:
Honeywell
301 Plainfield Road
Suite 330
Syracuse, New York 13212

Jeffrey S. Rogers, P.E.
Senior Vice President

March 2010



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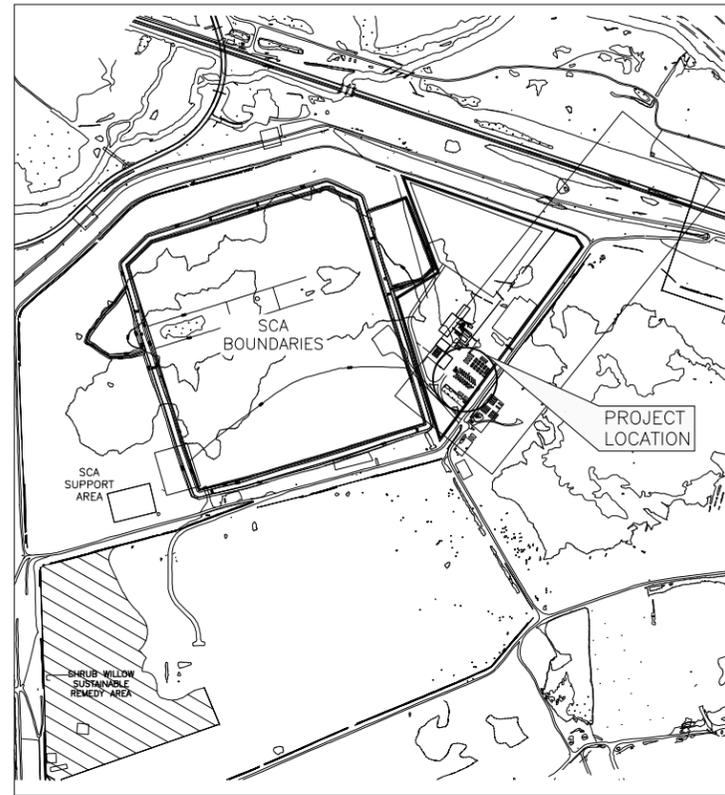
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DRAWINGS



LOCATION PLAN
NOT TO SCALE

ISSUED FOR NYSDEC AND COUNTY REVIEW

DESIGN PACKAGE DP #1

SCA WATER TREATMENT PLANT (WTP)

TOWN OF CAMILLUS, NEW YORK

**HONEYWELL INTERNATIONAL, INC.
MORRISTOWN, NEW JERSEY**

MARCH 2010



**O'BRIEN & GERE
ENGINEERS INC.**

5000 BRITTONFIELD PKWY
EAST SYRACUSE, NY 13057
PHONE: 315-437-6100

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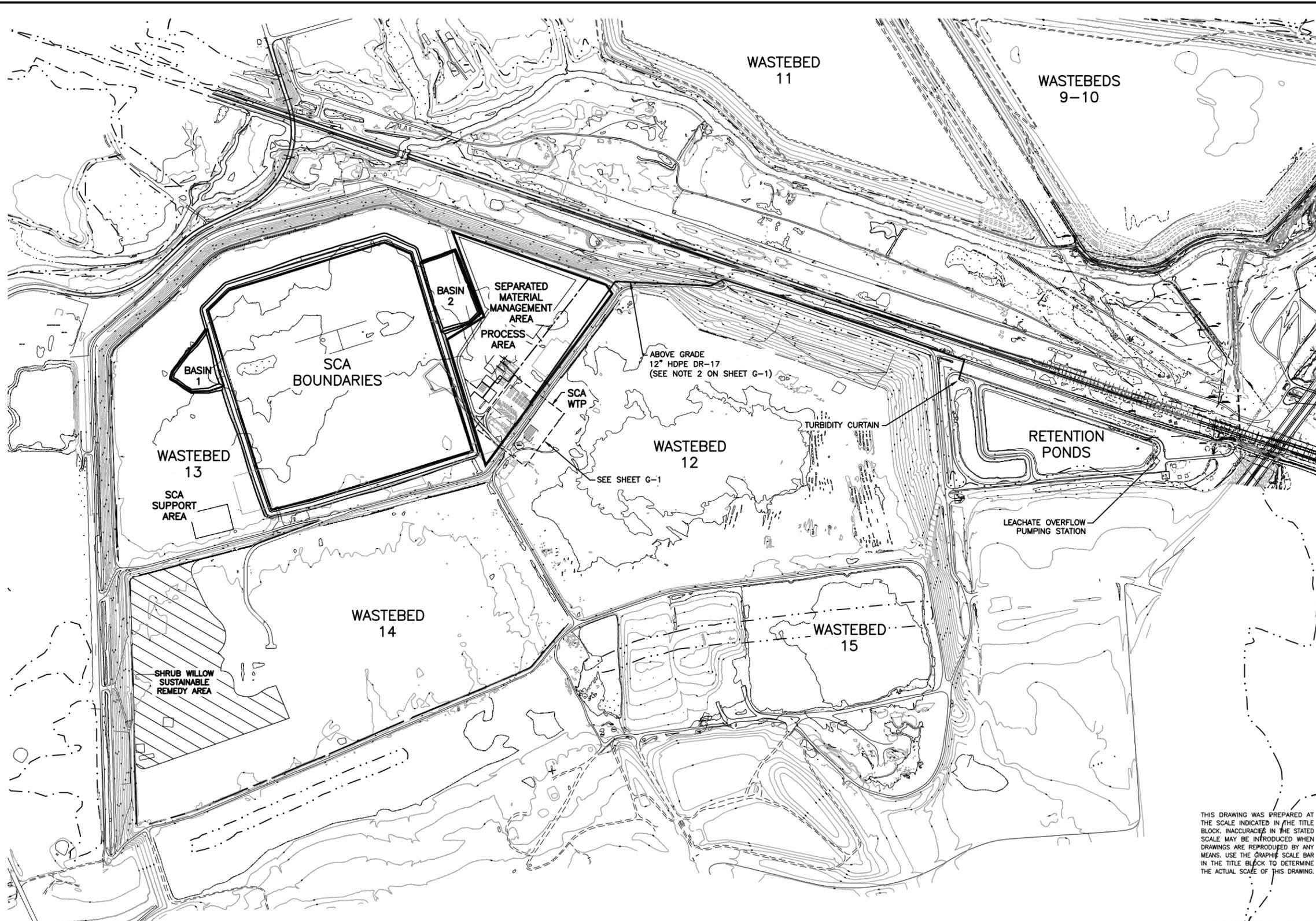
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PLAN
SCALE: 1"=400'



- NOTES:**
- NEW CONSTRUCTION INCLUDES SCA BOUNDARIES, BASINS 1 & 2, PROCESS AREA, SEPARATED MATERIAL MANAGEMENT AREA, SCA WTP, SCA SUPPORT AREA, AND THE EFFLUENT LINE.

- LEGEND**
- 100 YEAR FEMA FLOOD ZONE
 - - - NYS FRESHWATER WETLAND

NO.	DATE	REVISION	INIT.
C	3/10/10	DP#1 FOR NYSDEC AND COUNTY REVIEW	
B	2/12/10	DP #1 DRAFT FOR HONEYWELL REVIEW	
A	2/5/10	DRAFT FOR PERMIT SUBMISSION	



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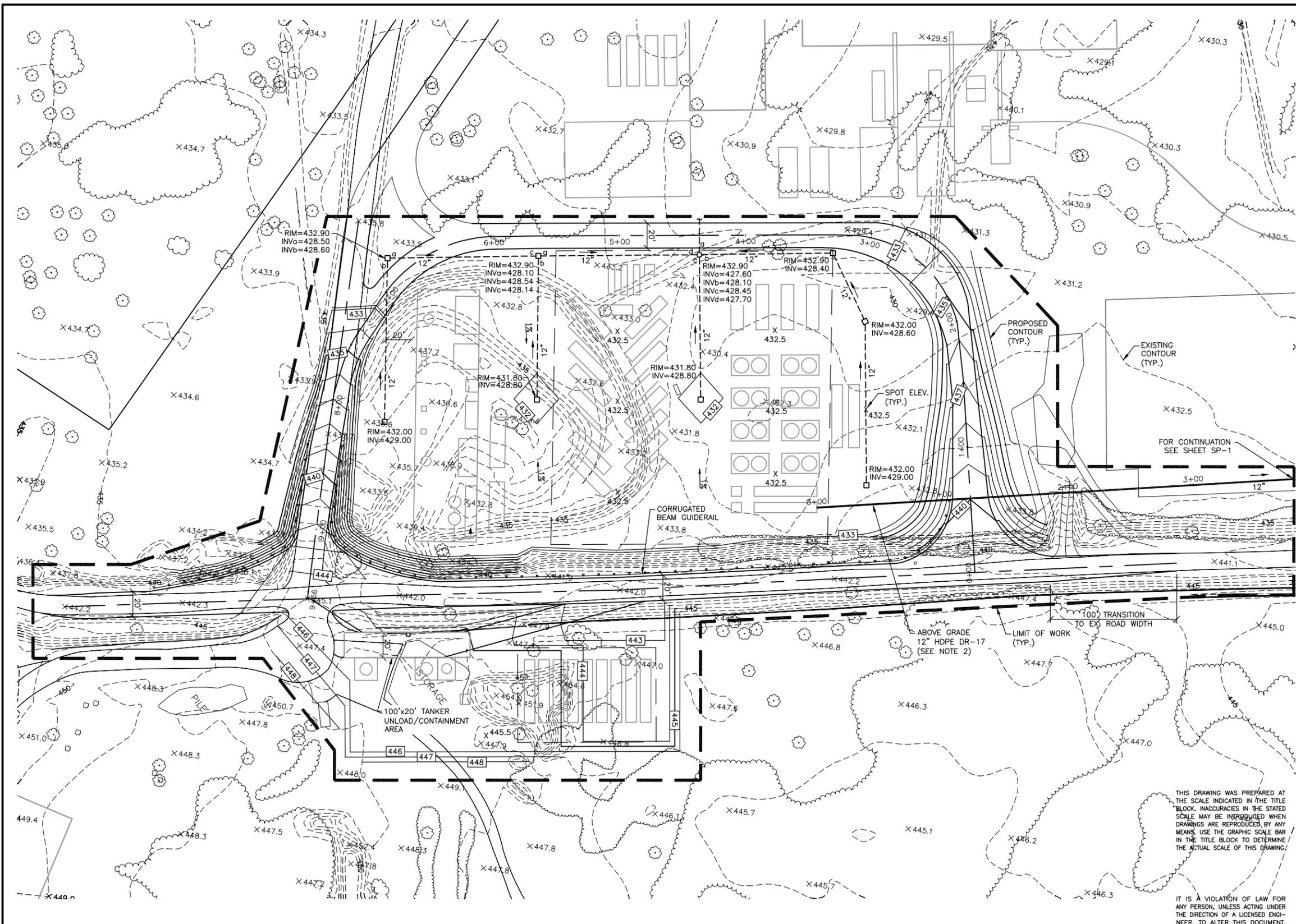
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DATE: 2/12/10



HONEYWELL INTERNATIONAL, INC.
DP #1
WATER TREATMENT PLANT
TOWN OF CAMILLUS, NEW YORK

OVERALL SITE PLAN

IN CHARGE OF _____	FILE NO. 1163.45613-SP1	SP-1
DESIGNED BY _____ CHECKED BY _____	DATE FEBRUARY 2010	
DRAWN BY _____		



1. SEE SHEET GA-1 FOR LABELING OF WATER TREATMENT PLANT EQUIPMENT.
2. 12" HDPE IS A TEMPORARY GRAVITY LINE FOR STORM WATER MANAGEMENT DURING CONSTRUCTION.

--- 446 --- EXISTING GRADE
 [437] PROPOSED GRADE

NO.	DATE	REVISION	INIT.
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HONEYWELL INTERNATIONAL, INC.
 DP #1
 WATER TREATMENT PLANT
 TOWN OF CAMILLUS, NEW YORK

GRADING PLAN

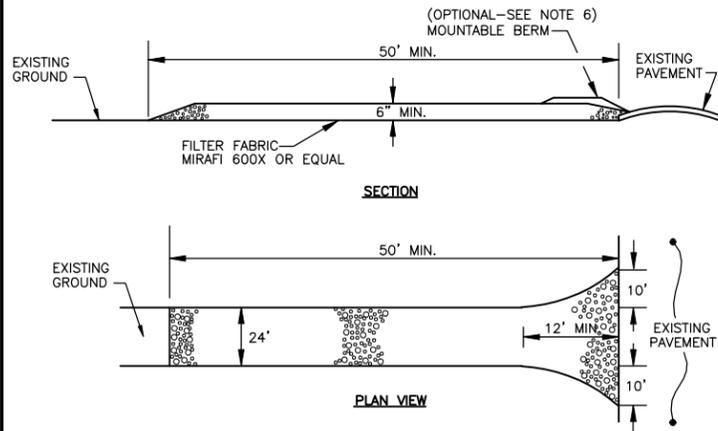
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PLAN
 SCALE: 1"=40'

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DESIGNED BY _____ CHECKED BY _____	DATE FEBRUARY 2010	
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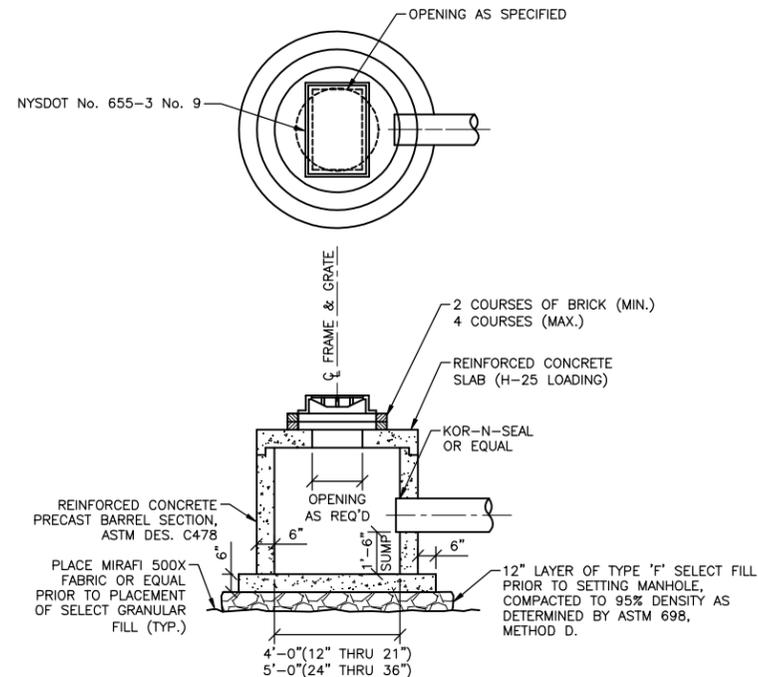


CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET
3. THICKNESS - NOT LESS THAN SIX (6) INCHES
4. WIDTH TWENTY-FOUR (24) FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE EGRESS OCCURS.
5. FILTER FABRIC (MIRAFI 600X OR EQUAL) - SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS NOT POSSIBLE, A MOUNTABLE BERM 3' WIDE (MIN.) WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO ADJACENT SEDIMENT BASINS.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT STORM WATER POLLUTION PREVENTION PLAN.

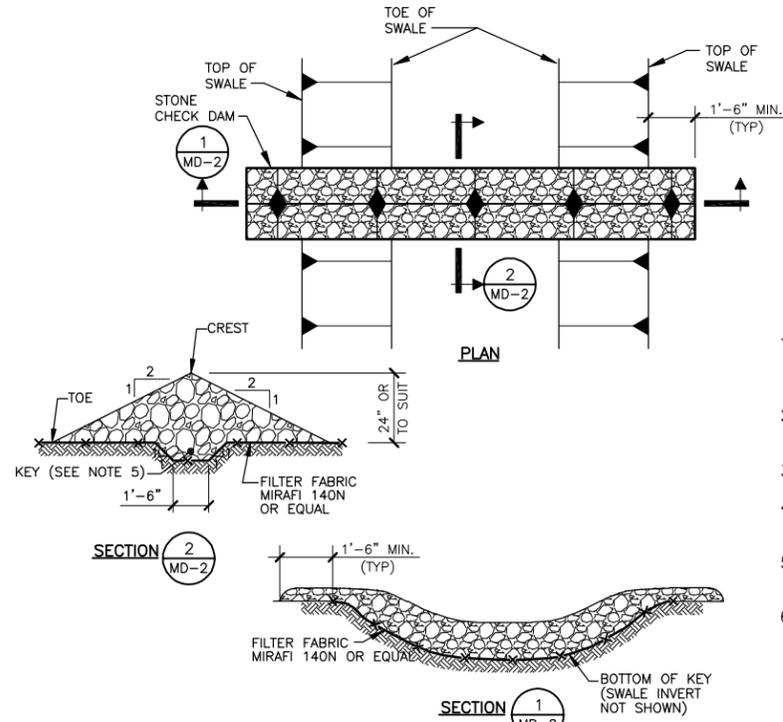
STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



TYPICAL CATCH BASIN DETAIL

NOT TO SCALE

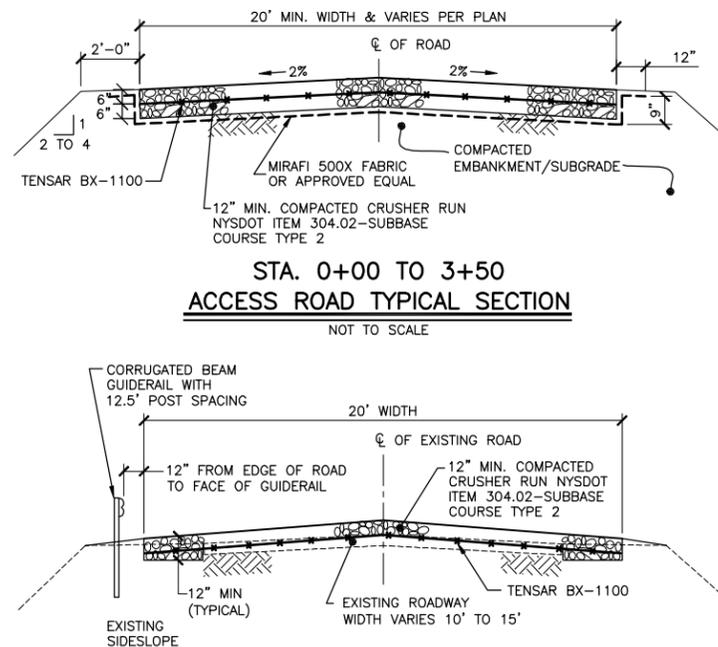


CONSTRUCTION SPECIFICATIONS

1. NYS DOT ITEM 623.12 STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM. MAXIMUM SPACING 300 FEET.
3. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. KEY SHALL BE 0'-6" DEEP AND LINED WITH FILTER FABRIC FOR FULL LENGTH OF CHECK DAM.

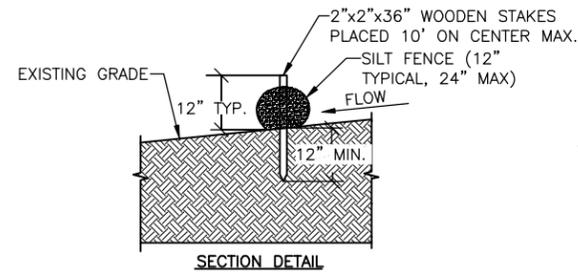
CHECK DAM DETAIL

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TYPICAL SECTION SITE ACCESS ROAD WIDENING

NOT TO SCALE



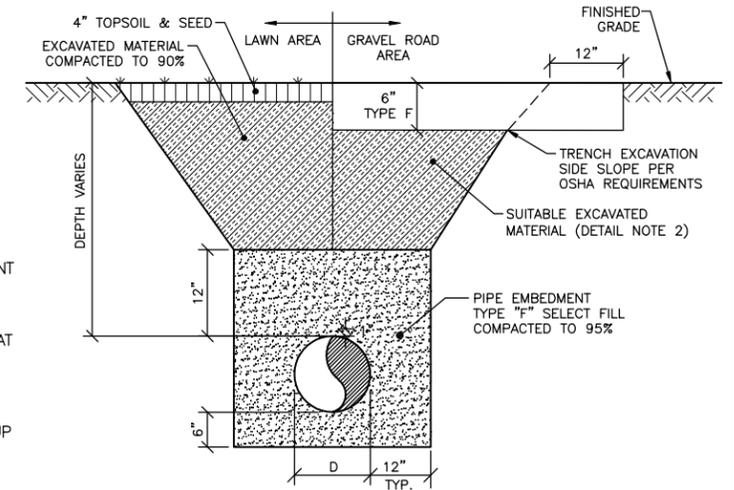
NOTES:

1. USE FILTREXX® SEDIMENT CONTROL SYSTEM BY FILTREXX® LAND IMPROVEMENT SYSTEMS OR APPROVED EQUAL. ONE SUCH APPROVED EQUAL IS MIRAFI ENVIROFENCE.
2. STAKES SHALL BE INSTALLED THROUGH THE MIDDLE OF THE SILT FENCE AT 10' INTERVALS MAXIMUM USING HARDWOOD STAKES.
3. SILT FENCE TO BE ALIGNED ALONG CONTOUR AS CLOSELY AS POSSIBLE.
4. BOTH ENDS OF EACH FENCE SECTION MUST EXTEND AT LEAST 10 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
5. SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.
6. ANY SILT FENCE SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.

STANDARD SYMBOL — SF — SF

SILT FENCE

NOT TO SCALE

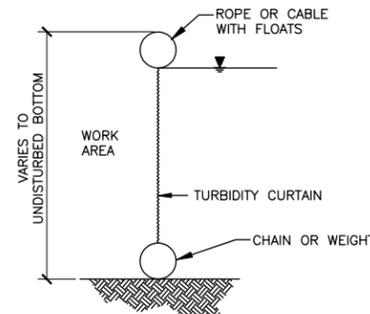


NOTES:

1. CONTRACTOR SHALL RESTORE EXISTING UNIMPROVED SURFACES WITH TOPSOIL AND SEED.
2. EXCAVATED MATERIAL MAY BE USED AS BACKFILL ONLY WHERE APPROVED BY OWNER.

TYPICAL UTILITY TRENCH DETAIL

NOT TO SCALE



TURBIDITY CURTAIN DETAIL

NOT TO SCALE

DETAIL NOTES:

1. IF A PRE-MANUFACTURED PRODUCT IS USED, THE TURBIDITY CURTAIN SHALL BE INSTALLED PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS, OVERLAPPING AND SECURING SIDE AND ENDS AS REQUIRED.
2. THE HEIGHT OF THE CURTAIN SHALL BE 20% GREATER THAN THE DEPTH OF THE WATER TO ALLOW FOR WATER LEVEL FLUCTUATIONS.
3. IF WATER DEPTH AT THE DESIGN ALIGNMENT IS MINIMAL, THE TOE CAN BE ANCHORED IN PLACE BY STAKING.

PRELIMINARY NOT FOR CONSTRUCTION

DATE: 2/12/10

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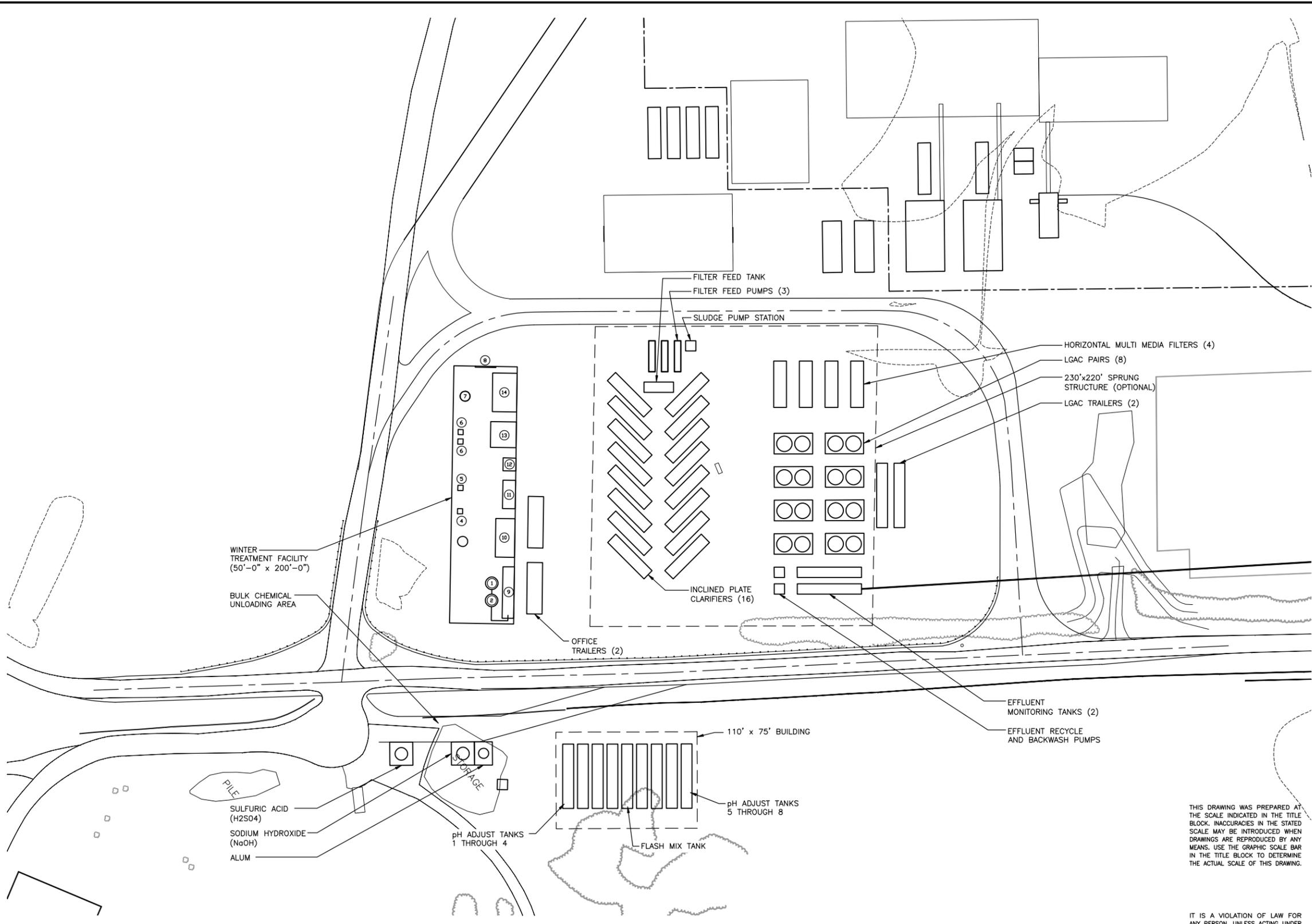
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HONEYWELL INTERNATIONAL, INC.
DP #1
WATER TREATMENT PLANT
TOWN OF CAMILLUS, NEW YORK

MISCELLANEOUS DETAILS

IN CHARGE OF _____	FILE NO. 1163.45613-MD1
DESIGNED BY _____ CHECKED BY _____	DATE FEBRUARY 2010
DRAWN BY _____	

MD-1



KEYED NOTES FOR WATER TREATMENT FACILITY:

1. pH ADJUST TANK 1
2. pH ADJUST TANK 2
3. NOT USED
4. ALUM TOTE
5. NaOH TOTE
6. BACKWASH AND EFFLUENT PUMPS
7. TREATED WATER TANK
8. 16'-0" WIDE DOOR
9. FLASH MIX AND FLOCCULATION
10. INCLINED PLATE CLARIFIER
11. FILTER FEED TANK
12. FILTER FEED PUMP
13. MULTI MEDIA FILTER
14. GRANULAR ACTIVATED CARBON

NO.	DATE	REVISION	INIT.
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A	2/4/10	DP #1 INTERNAL REVIEW	



HONEYWELL INTERNATIONAL, INC.
 DP #1
 WATER TREATMENT PLANT
 TOWN OF CAMILLUS, NEW YORK

GENERAL
 SITE CIVIL
 GENERAL ARRANGEMENT

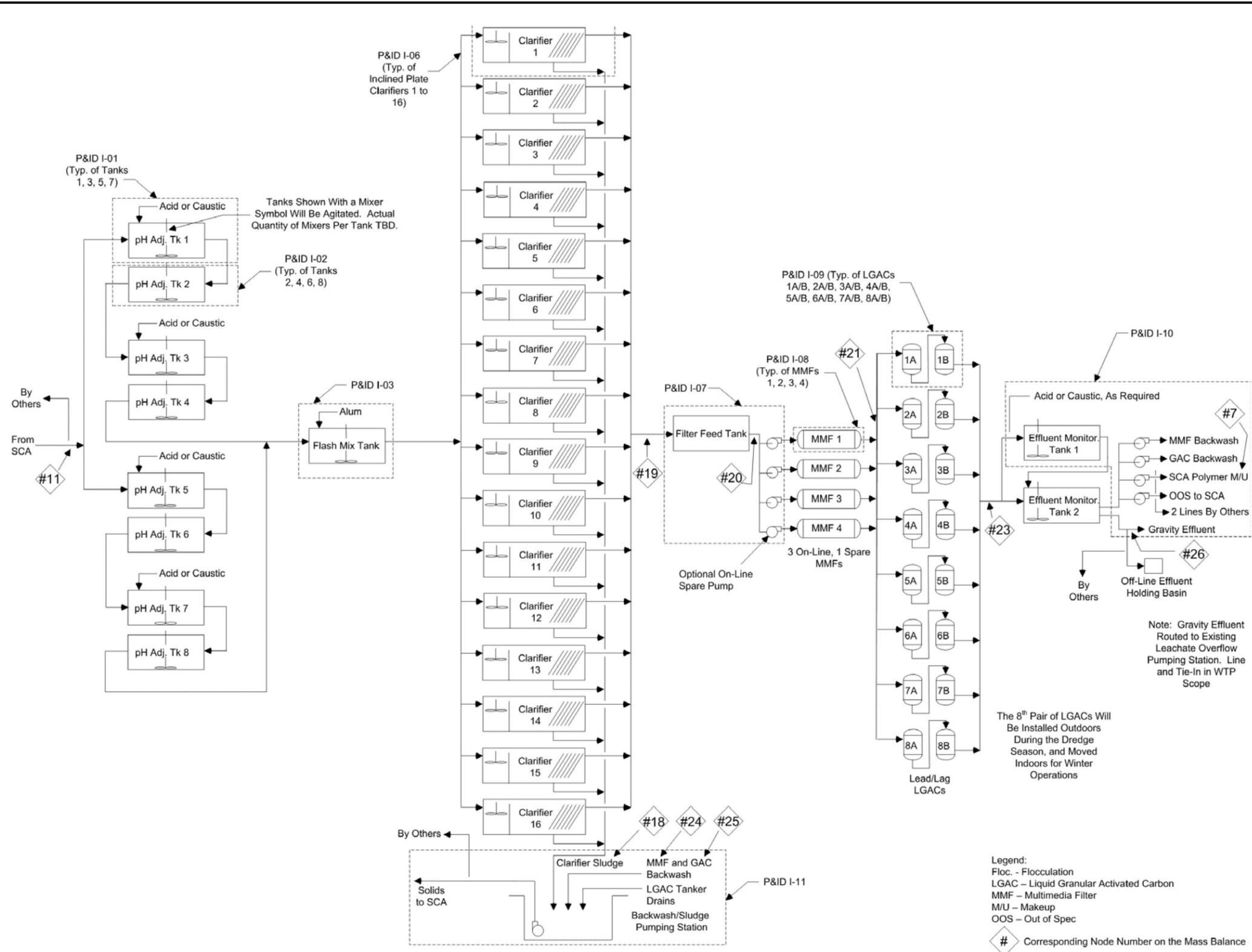
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SITE PLAN
 SCALE: 1"=40'

IN CHARGE OF JSR	FILE NO. 1163.44523	GA-01
DESIGNED BY GBE CHECKED BY PDS	DATE	
DRAWN BY JAS	FEBRUARY 2010	



31163445234\Detailed Design PFD Feb 3 10.vsd

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A	2/12/10	DP #1 DRAFT FOR HONEYWELL REVIEW	
NO.	DATE	REVISION	INIT.



HONEYWELL INTERNATIONAL, INC.
DP #1
WATER TREATMENT PLANT
TOWN OF CAMILLUS, NEW YORK

MECHANICAL
OUTDOOR TRAINS
PROCESS FLOW DIAGRAM

IN CHARGE OF JSR	FILE NO. 1163.44523-GA1	PFD-1
DESIGNED BY GBE CHECKED BY PDS	DATE	
DRAWN BY LMW	FEBRUARY 2010	