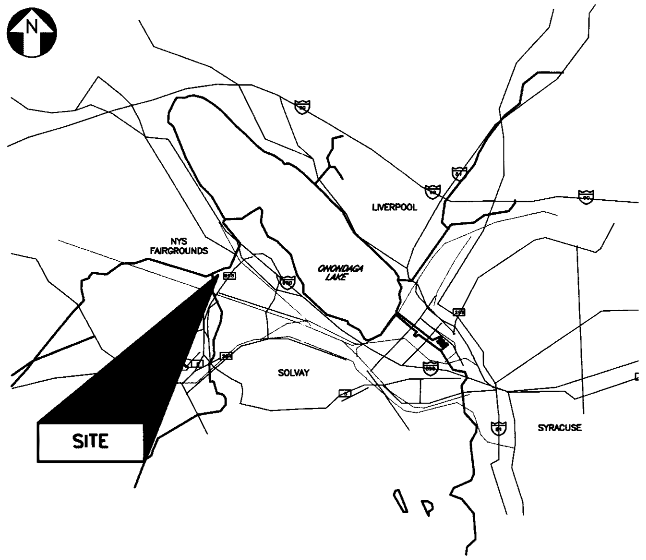
ONONDAGA LAKE
SEDIMENT MANAGEMENT FINAL DESIGN
SYRACUSE, NEW YORK

Prepared For:
HONEYWELL

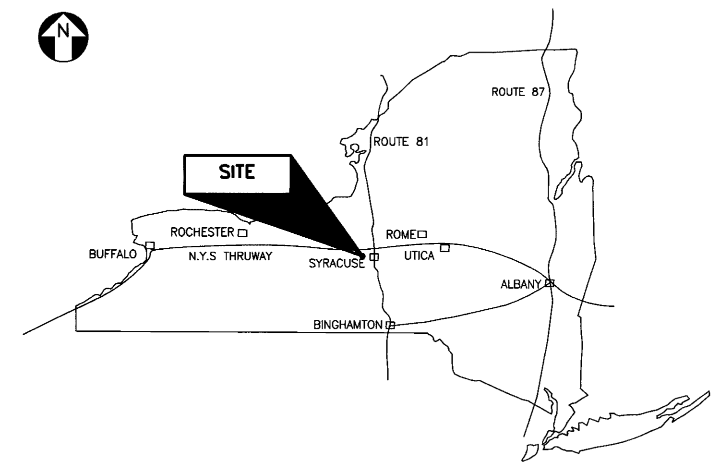


SITE LOCATION MAP
NOT TO SCALE

DRAWING INDEX

NUMBER	REV	TITLE
GENERAL		
444853-200-G-001	1	TITLE SHEET AND DRAWING INDEX
444853-200-G-002	1	DRAWING INDEX
CIVIL		
444853-200-C-001	0	SITE PLAN OVERVIEW
444853-200-C-002	0	WASTEBEDS 12-15 PLAN
444853-200-C-003	0	SLURRY PROCESS AREA PLAN
444853-200-C-004	1	SLURRY PIPELINE AND PUMP STATION LOCATION PLAN
444853-200-C-101	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 1 INDEX
444853-200-C-102	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 2
444853-200-C-103	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 3
444853-200-C-104	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 4
444853-200-C-105	2	SLURRY PIPELINE ALIGNMENT PLANS SHEET 5
444853-200-C-106	1	SLURRY PIPELINE ALIGNMENT PLANS SHEET 6
444853-200-C-107	2	SLURRY PIPELINE ALIGNMENT PLANS SHEET 7
444853-200-C-108	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 8
444853-200-C-109	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 9
444853-200-C-110	1	SLURRY PIPELINE ALIGNMENT PLANS SHEET 10
444853-200-C-111	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 11
444853-200-C-112	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 12
444853-200-C-113	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 13
444853-200-C-114	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 14
444853-200-C-115	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 15
444853-200-C-116	1	SLURRY PIPELINE ALIGNMENT PLANS SHEET 16
444853-200-C-117	1	SLURRY PIPELINE ALIGNMENT PLANS SHEET 17
444853-200-C-118	2	SLURRY PIPELINE ALIGNMENT PLANS SHEET 18
444853-200-C-119	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 19
444853-200-C-120	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 20
444853-200-C-121	0	SLURRY PIPELINE ALIGNMENT PLANS SHEET 21
444853-200-C-122	1	SLURRY PIPELINE ALIGNMENT PARTIAL PLANS
444853-200-C-123	2	SLURRY PIPELINE ALIGNMENT SECTIONS AND DETAILS
444853-200-C-124	0	SLURRY PIPELINE ALIGNMENT LEAK DETECTION DETAILS
444853-200-C-125	0	SLURRY PIPELINE ALIGNMENT SECTIONS AND PROFILES SHEET 1 OF 5
444853-200-C-126	0	SLURRY PIPELINE ALIGNMENT SECTIONS AND PROFILES SHEET 2 OF 5
444853-200-C-127	0	SLURRY PIPELINE ALIGNMENT SECTIONS AND PROFILES SHEET 3 OF 5
444853-200-C-128	0	SLURRY PIPELINE ALIGNMENT SECTIONS AND PROFILES SHEET 4 OF 5
444853-200-C-129	0	SLURRY PIPELINE ALIGNMENT SECTIONS AND PROFILES SHEET 5 OF 5
444853-200-C-130	0	SLURRY PIPELINE ALIGNMENT PROFILE
444853-200-C-131	0	CIVIL DOT DETAILS GATE AND FENCE
444853-200-C-132	0	NYSDOT TRAFFIC PLANNING NOTES AND REFERENCES
444853-200-C-133	0	REMEDIATION AREA 'A' SPUR

(DRAWING INDEX CONTINUED ON DRAWING 444853-200-G-002)



THE STATE OF NEW YORK
NOT TO SCALE

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED DRAWING INDEX	7/29/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/20/11

SEAL
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
TITLE SHEET AND DRAWING INDEX

SCALE
NO SCALE

DRAWING NO. 444853-200-G-001
REV. 1

DRAWING INDEX

NUMBER	REV	TITLE
CIVIL (CONTINUED)		
444853-200-C-201	0	SHORELINE SUPPORT AREA PLAN
444853-200-C-301	0	SLURRY PROCESS AREA CIVIL GRADING PLAN
444853-200-C-302	0	SLURRY PROCESS AREA CIVIL UTILITIES AND STORM DRAIN PLAN
444853-200-C-303	0	SLURRY PROCESS AREA CIVIL SECTIONS AND DETAILS
444853-200-C-304	0	SLURRY PROCESS AREA CIVIL STORMWATER PUMP STATION DETAILS
444853-200-C-401	1	SLURRY PIPELINE BOOSTER PUMP 1 PUMP STATION PLAN
444853-200-C-402	1	SLURRY PIPELINE BOOSTER PUMP 2 PUMP STATION PLAN
444853-200-C-403	0	SLURRY PIPELINE BOOSTER PUMP 3 PUMP STATION PLAN
444853-200-C-404	0	SLURRY PIPELINE BOOSTER PUMP 4 PUMP STATION PLAN
444853-200-C-405	0	SLURRY PIPELINE BOOSTER PUMP STATION DETAILS
444853-200-C-406	0	EROSION AND SEDIMENT CONTROL DETAILS
NYSDOT REFERENCE DRAWINGS		
R3-11-8/6/09		LEGEND AND TABLES
R3-22-8/10/09		SHOULDER CLOSURE EXPRESSWAY / FREEWAY
R3-24-8/7/09		PARTIAL EXIT RAMP CLOSURE EXPRESSWAY / FREEWAY
R3-31-5/26/10		SINGLE LANE CLOSURE MULTI LANE DIVIDED HIGHWAY
606-04		SHEET 1 OF 4, BOX BEAM GUIDE RAIL
606-04		SHEET 2 OF 4, BOX BEAM GUIDE RAIL
606-04		SHEET 3 OF 4, BOX BEAM GUIDE RAIL
606-06		BOX BEAM END ASSEMBLY TYPE III, GRADING, PAYMENT AND LAYOUT DETAILS
PROCESS MECHANICAL		
444853-200-M-001	0	SLURRY PROCESS AREA PLAN
444853-200-M-002	0	SLURRY PROCESS AREA EQUIPMENT AND YARD PIPING PLAN
444853-200-M-003	0	SCA EQUIPMENT AND PIPING PLAN
444853-200-M-004	0	SLURRY PROCESS AREA SCREEN SHAKER BEDS PIPING PLAN
444853-200-M-005	0	SLURRY PROCESS AREA SCREEN SHAKER BEDS PIPING SECTION
444853-200-M-006	0	SLURRY PROCESS AREA SCA PIPING PARTIAL PLANS
444853-200-M-007	0	SCA PIPING SECTIONS AND DETAILS

DRAWING INDEX

NUMBER	REV	TITLE
PROCESS P&ID		
444853-200-D-001	0	MASS BALANCE PROCESS FLOW DIAGRAM
444853-200-D-002	0	MASS BALANCE PROCESS FLOW DIAGRAM TABLES
444853-200-D-101	0	P&ID LEGEND AND ABBREVIATION SHEET 1 OF 2
444853-200-D-101A	0	P&ID LEGEND AND ABBREVIATION SHEET 2 OF 2
444853-200-D-102	0	SLURRY TRANSPORT SYSTEM P&ID SLURRY PIPELINE DREDGE & BOOSTER PUMP 1
444853-200-D-103	0	SLURRY TRANSPORT SYSTEM P&ID SLURRY PIPELINE BOOSTER PUMP 2
444853-200-D-104	0	SLURRY TRANSPORT SYSTEM P&ID SLURRY PIPELINE BOOSTER PUMP 3
444853-200-D-105	0	SLURRY TRANSPORT SYSTEM P&ID SLURRY PIPELINE BOOSTER PUMP 4
444853-200-D-106	0	SLURRY TRANSPORT SYSTEM P&ID SLURRY PRECONDITIONING PRIMARY SCREENS & TANKS
444853-200-D-107	0	SLURRY TRANSPORT SYSTEM P&ID SLURRY PRECONDITIONING GEOTEXTILE TUBE FEED PUMPS
444853-200-D-108		(NOT USED)
444853-200-D-109	0	SLURRY TRANSPORT SYSTEM P&ID SLURRY PRECONDITIONING OVERFLOW SOLIDS STOCKPILE SUMP PUMP
444853-200-D-110	0	SLURRY TRANSPORT SYSTEM P&ID POLYMER FEED SYSTEM
444853-200-D-111	0	SLURRY TRANSPORT SYSTEM P&ID SCA AND WEST BASIN
444853-200-D-112	0	SLURRY TRANSPORT SYSTEM P&ID SCA AND EAST BASIN
444853-200-D-113	0	SLURRY TRANSPORT SYSTEM P&ID DRY POLYMER MIXING AND MAKE-UP WATER
444853-200-D-114	0	SLURRY TRANSPORT SYSTEM P&ID SCHEDULE OF INTERLOCK DESCRIPTIONS
ELECTRICAL/INSTR.		
444853-200-E-000	0	GENERAL NOTES, LEGEND AND ABBREVIATIONS
444853-200-E-021	0	ONE-LINE DIAGRAM BOOSTER PUMP STATION 1
444853-200-E-022	0	ONE-LINE DIAGRAM BOOSTER PUMP STATION 2 & 3
444853-200-E-023	0	ONE-LINE DIAGRAM BOOSTER PUMP STATION 4
444853-200-E-024	0	ONE-LINE DIAGRAM PROCESS AREA & SCA

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED DRAWING INDEX	7/29/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY: JTS	7/29/11
CHECKED BY: TCD	7/29/11
APPROVED BY: DDS	7/29/11
PROJECT MGR.: PEB	7/29/11

SEAL: STATE OF NEW YORK · DAVID D. STEELE · LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE: DRAWING INDEX

SCALE: NO SCALE

DRAWING NO.: 444853-200-G-002 REV.: 1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\GEN\444853-200-G-002.DWG
PLOT DATE: 8/24/2011 8:34 AM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL, IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.

1200 600 0 1200 2400

SCALE: 1"=1200'

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL
STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SITE PLAN OVERVIEW

SCALE
SCALE 1"=1200'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-001
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-001.DWG
PLOT DATE: 8/23/2011 11:23 AM PLOTTED BY: SIVALIA, JACK

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	TCD	DDS

DRAWN BY: JTS	DATE: 7/29/11
CHECKED BY: TCD	DATE: 7/29/11
APPROVED BY: DDS	DATE: 7/29/11
PROJECT MGR.: PEB	DATE: 7/29/11

SEAL: STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

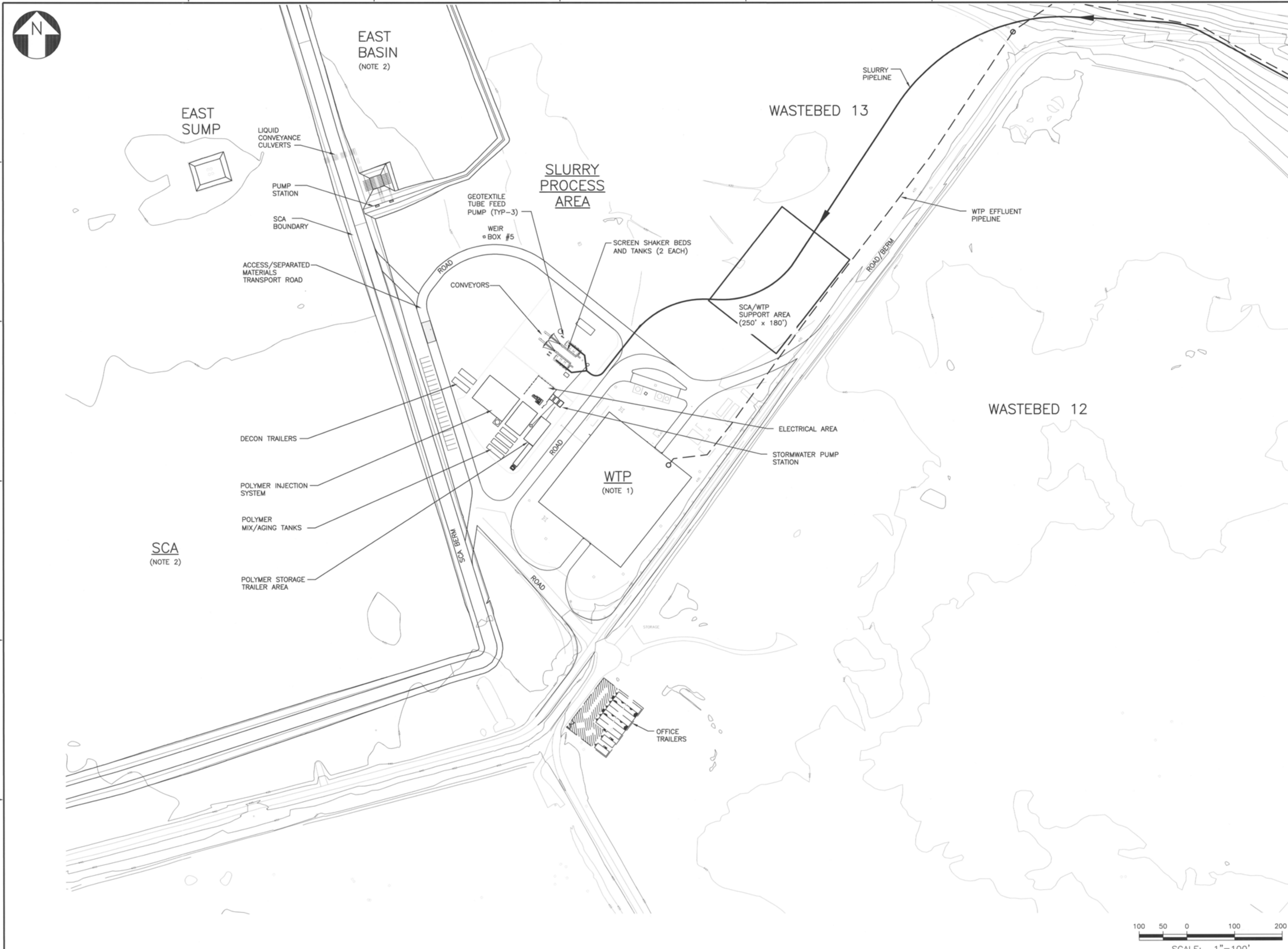
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
WASTEBEDS 12–15 PLAN

SCALE: SCALE 1"=400' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-002 REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-002.DWG
PLOT DATE: 8/23/2011 10:49 AM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE SCA WATER TREATMENT PLANT (WTP) DESIGN DRAWINGS FOR WTP PLANS AND DETAILS.
2. SEE SEDIMENT CONSOLIDATION AREA FINAL DESIGN, BASIN DESIGN AND INSTRUMENTATION INSTALLATION PLAN DRAWING SETS (3) FOR SCA DESIGN.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW YORK · LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

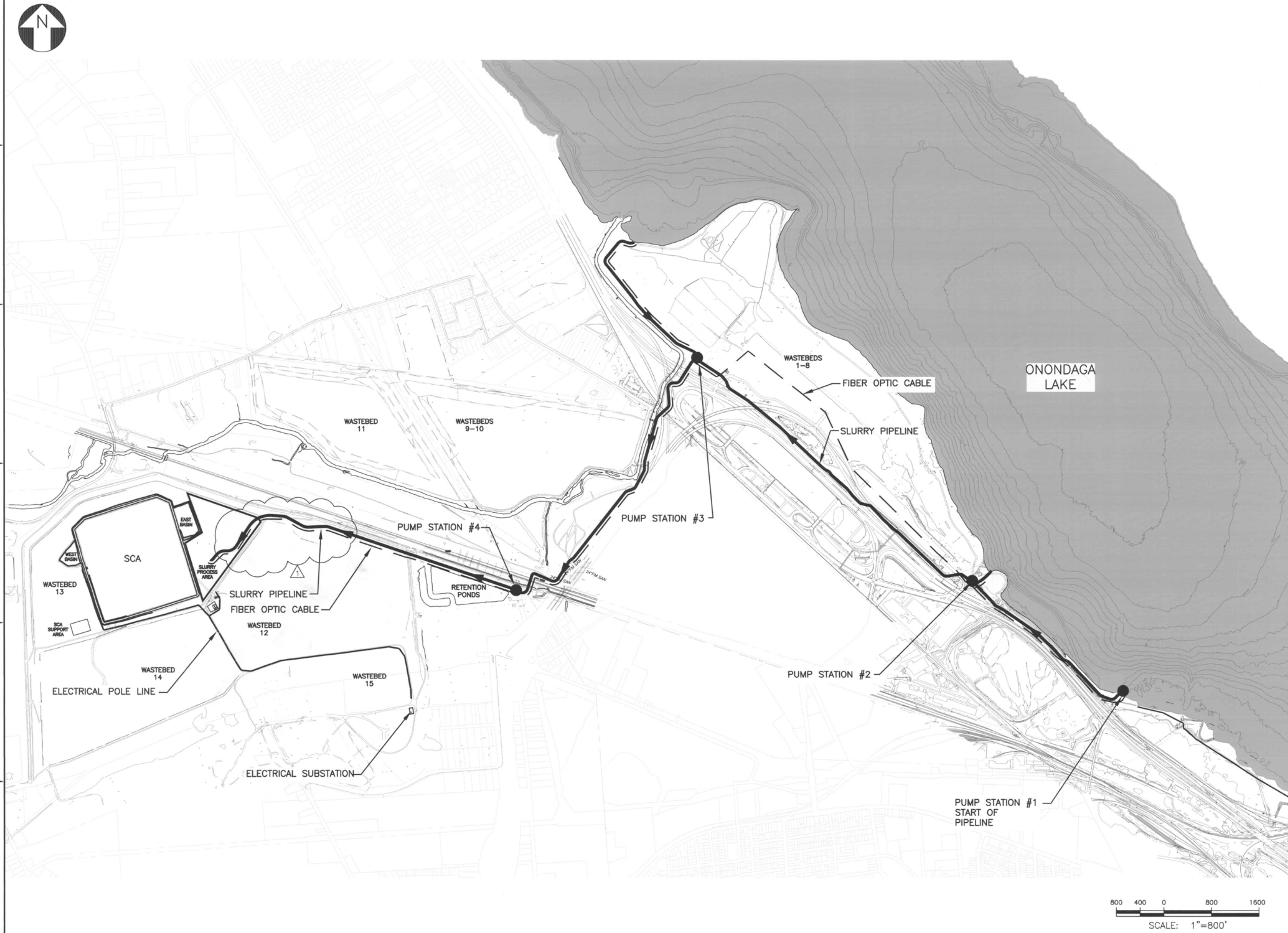
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PROCESS AREA PLAN

SCALE: SCALE 1"=100' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-003 REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-003.DWG
PLOT DATE: 8/23/2011 12:05 PM PLOTTED BY: SWALA, JACK



LEGEND:

- PUMP STATION LOCATIONS
- 16"/22" SLURRY PIPELINE
- FIBER OPTIC CABLE BURIED OR ON GRADE, DEPENDING ON SITE CONSIDERATIONS.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED PIPELINE ALIGNMENT	7/25/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW YORK, DAVID D. STEELE, LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

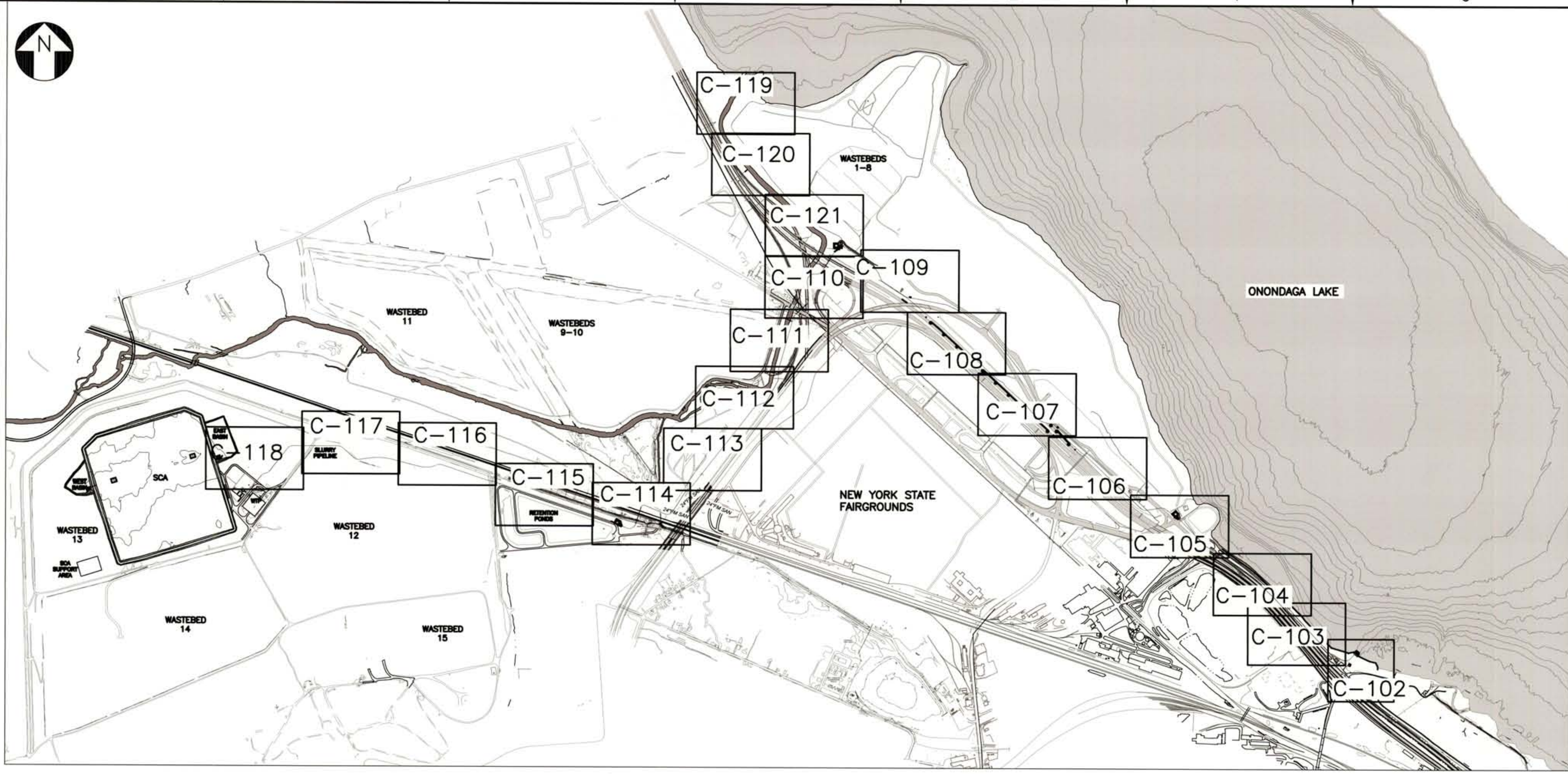
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE AND PUMP STATION LOCATION PLAN

SCALE: SCALE 1"=800' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-004
REV.: 1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-004.DWG
PLOT DATE: 8/23/2011 12:17 PM PLOTTED BY: SIVALIA, JACK



GENERAL NOTES:

1. SURVEY COORDINATES ARE REFERENCED HORIZONTALLY TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND PROJECTED ON THE NEW YORK STATE PLANE COORDINATE SYSTEM (CENTRAL ZONE) AND VERTICALLY TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. GRID NORTH IS REFERENCED TO NAD83 AND PROJECTED ON THE NEW YORK STATE PLANE COORDINATE SYSTEM (CENTRAL ZONE).
3. PROPERTY BOUNDARIES OBTAINED FROM AVAILABLE TAX MAPS AND SIMILAR DOCUMENTS. BOUNDARIES ARE APPROXIMATE AND ARE PROVIDED FOR INFORMATION ONLY.
4. SITE PLAN TOPOGRAPHY AND FEATURES WERE COMPILED FROM SEVERAL SURVEY SOURCE DRAWINGS. THE BASE SITE PLAN DEPICTS KNOWN EXISTING CONDITIONS AND REFLECTS THE BEST AVAILABLE INFORMATION AT THE TIME THESE DRAWINGS WERE DEVELOPED.
5. EXISTING TOPOGRAPHIC GRADE SURFACE IS SHOWN WITHIN THIS DRAWING PACKAGE.
6. DUE TO THE UNKNOWN CONDITION AND POTENTIALLY UNKNOWN LOCATION OF BURIED UTILITIES, STRUCTURAL INTEGRITY OF ADJACENT BURIED UTILITIES WERE NOT CONSIDERED AS PART OF THIS DESIGN. CONTRACTOR SHALL CONTACT DIG SAFE N.Y. PRIOR TO CONSTRUCTION.
7. CONTRACTOR TO VERIFY LOCATIONS AND INVERT ELEVATIONS OF EXISTING PIPING AND UTILITIES. APPROXIMATE LOCATIONS OF EXISTING UNDERGROUND PIPING AND UTILITIES ARE SHOWN, BUT OTHERS MAY EXIST THAT ARE NOT IDENTIFIED. CONTRACTOR RESPONSIBLE TO FIELD VERIFY UTILITY LOCATIONS.
8. CONTRACTOR SHALL FIELD EXCAVATE ALL LOCATIONS WHERE POTENTIAL CONFLICTS MAY BE ENCOUNTERED ALONG THE BURIED SECTIONS OF NEW 22" FORCE MAIN.

(NOTES CONTINUED BELOW)

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

GENERAL LEGEND

Symbol	Description	Symbol	Description
P1	POINT OF CONNECTION TIE-IN NUMBER BETWEEN NEW AND EXISTING PIPING (OR BETWEEN CONTRACTS)	—W—	WATER LINE
	16"/22" SLURRY PIPELINE	—Sa—	SANITARY SEWER
	EXISTING FORCE MAINS	—St—	STORM SEWER
	BUILDING LINE	UP	UTILITY POLE
	PAVEMENT EDGE		GUY WIRE & ANCHOR
	APPROXIMATE PROPERTY LINE	CS	CONCRETE STRUCTURE
	APPROXIMATE ROADWAY BOUNDARY	CB	CATCH BASINS
	SILT FENCE	MH	MANHOLE
	STONE RIP-RAP	EMH	ELECTRIC MANHOLE
× 413.95	SPOT ELEVATION	GLM	GAS LINE MARKER
BL	BOLLARD	HYD	HYDRANT
	TESTING PIPE FOUND	WV	WATER VALVE
C.P. 4	SURVEY CONTROL POINT		MONITORING WELL
	SIGN - SINGLE POST		
	SIGN - DOUBLE POST		

ABBREVIATIONS

BP	ALIGNMENT BEGINNING POINT
EP	ALIGNMENT END POINT
PC	TANGENT CURVE INTERSECTION
PT	CURVE TANGENT INTERSECTION
PI	POINT OF INTERSECTION
Asp.	ASPHALT
Bot.	BOTTOM
CC	CURB CUT
CI	CAST IRON
Conc.	CONCRETE
ELEV.	ELEVATION
FF	FIRST FLOOR ELEVATION
Inv.	INVERT
N / F	NOW OR FORMERLY
NM	NIAGARA MOHAWK
Pvmt.	PAVEMENT
STY.	STORY
OHW	OVERHEAD WIRES
L	LENGTH
R	RADIUS

GENERAL NOTES: (CONTINUED)

9. IN WETLAND AREAS, DISTURBED AREAS SHALL BE SEEDED WITH FLOODPLAIN WILDLIFE MIX: ERNMX-154" FROM ERNST CONSERVATION SEEDS, OR EQUIVALENT AT A RATE OF 35 LBS. PER ACRE. AREAS SHALL THEN BE MULCHED WITH STRAW MULCH AT A RATE OF 1 TON PER ACRE. SPECIES INCLUDED IN THIS MIX ARE LISTED BELOW:

   COMMON NAME (LATIN NAME)
   FOX SEDGE, PA ECOTYPE (CAREX VULPINOIDEA, PA ECOTYPE)
   VIRGINIA WILD RYE, PA ECOTYPE (ELYMUS VIRGINICUS, PA ECOTYPE)
   BIG BLUESTEM, 'NIAGARA' (ANDROPOGON GERARDII, 'NIAGARA')
   INDIANGRASS, 'PRAIRIE VIEW', IN ECOTYPE (SORGHASTRUM NUTANS, 'PRAIRIE VIEW', IN ECOTYPE)
   BLUNT BROOM SEDGE, PA ECOTYPE (CAREX SCOPARIA, PA ECOTYPE)
   BLUE VERVAIN (VERBENA HASTATA)
   SWITCHGRASS, 'SHELTER' (PANICUM VIRGATUM, 'SHELTER')
   FRINGED (NODDING) SEDGE, PA ECOTYPE (CAREX CRINITA, PA ECOTYPE)
   GRASS LEAVED GOLDENROD, PA ECOTYPE (EUTHAMIA GRAMINIFOLIA (SOLIDAGO G.), PA ECOTYPE)
   COMMON SNEEZEWEED (HELENIUM AUTUMNALE)
   PURPLE STEMMED ASTER, PA ECOTYPE (ASTER PUNICEUS (SYMPHYOTRICHUM PUNICEUM), PA ECOTYPE)
   AWL SEDGE, PA ECOTYPE (CAREX STIPATA, PA ECOTYPE)
   BONESET, PA ECOTYPE (EUPATORIUM PERFOLIATUM, PA ECOTYPE)
   OX EYE SUNFLOWER, PA ECOTYPE (HELIOPSIS HELIANTHOIDES, PA ECOTYPE)
   JOE PYE WEED, PA ECOTYPE (EUPATORIUM FISTULOSUM, PA ECOTYPE)
   SEEDBOX, PA ECOTYPE (LUDWIGIA ALTERNIFOLIA, PA ECOTYPE)
   SWAMP MILKWEED, PA ECOTYPE (ASCLEPIAS INCARNATA, PA ECOTYPE)
   WILD BERGAMOT (MONARDA FISTULOSA)

10. IN RESOURCE AREAS, IMPACTED SPECIES SHALL BE IDENTIFIED. IN AREAS WHERE SALT MARSH GRASS, LEPTOCHLOA FUSCA SUBSP. FASCICULARIS, OR ANNUAL SALT MARSH ASTER, SYMPHYOTRICHUM SUBULATUM, IS PRESENT AND EXCAVATION OR DISTURBANCE IS TO OCCUR, TOPSOIL TO APPROXIMATELY 4" DEPTH SHALL BE EXCAVATED, STOCKPILED AND SUBSEQUENTLY REPLACED. FOLLOWING SOIL REPLACEMENT, THESE AREAS SHALL BE SEEDED WITH 0.5 POUNDS PER ACRE OF SEEDS FROM THE IMPACTED SPECIES ALONG WITH THE SPECIES IN FOLLOWING TABLE AND APPROXIMATELY ONE TON PER ACRE OF STRAW MULCH. SEEDS OF IMPACTED SPECIES SHALL BE COLLECTED AS NEEDED FROM OTHER POPULATIONS ON HONEYWELL PROPERTY. SEEDS SHALL BE COLLECTED WHEN RIPE, I.E., WHEN THE SEED FALLS READILY FROM THE STEM. SEEDS MAY BE COLLECTED, AIR-DRIED AT ROOM TEMPERATURE FOR TWO WEEKS AND STORED AT FOURY DEGREES FARENHEIGHT FOR UP TO EIGHT MONTHS PRIOR TO BROADCASTING. SEED SHALL BE APPLIED ANY TIME EXCEPT DURING THE MONTHS OF SEPTEMBER AND OCTOBER

COMMON NAME (LATIN NAME)	POUNDS PER ACRE
ALKALIGRASS (PUCCINELLIA DISTANS)	10
CREEPING BENTGRASS (AGROSTIS STOLONIFERA)	10
ANNUAL RYE (LOLIUM MULTIFLORUM)	10
TOTAL	30

11. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN APPROVED BY THE NYSDEC IN AUGUST 2010 AND SUBSEQUENT UPDATES.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY: JTS	DATE: 5\20\11	SEAL
CHECKED BY: TCD	DATE: 5\20\11	
APPROVED BY: DDS	DATE: 5\20\11	
PROJECT MGR.: PEB	DATE: 5\20\11	

STATE OF NEW YORK · LICENSED PROFESSIONAL ENGINEER · No. 0822

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 1 INDEX

SCALE: NOT TO SCALE

DRAWING NO.: 444853-200-C-101 | REV.: 0

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE DRAWING 444853-200-C-401 FOR DETAILED CONFIGURATION AND LAYOUT OF BOOSTER PUMP STATION.
3. EXISTING GRADE CONTOURS PRIOR TO INSTALLATION OF BARRIER WALL ARE SHOWN. SITE RESTORATION OF THIS AREA ARE IN PROGRESS.
4. SEE DRAWINGS 43640003, SHEET 3 OF 23 FOR REVISED GENERAL GRADING PLAN WITHIN THE EAST FLUME AREA.
5. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

PROPERTY LINE

WETLAND BOUNDARY

SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 5/20/11	SEAL
CHECKED BY TCD	DATE 5/20/11	
APPROVED BY DDS	DATE 5/20/11	
PROJECT MGR. PEB	DATE 5/20/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 2

SCALE
SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-102
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/18/2011 8:45 AM PLOTTED BY: SIVALIA, JACK

CONTINUED ON DWG 444853-200-C-104

CONTINUED ON DWG 444853-200-C-102

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. EXISTING GRADE CONTOURS PRIOR TO INSTALLATION OF BARRIER WALL ARE SHOWN. SITE MODIFICATIONS AND RESTORATION OF THIS AREA ARE IN PROGRESS.

LEGEND:

— - — - — PROPERTY LINE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 5/20/11	SEAL
CHECKED BY TCD	DATE 5/20/11	
APPROVED BY DDS	DATE 5/20/11	
PROJECT MGR. PEB	DATE 5/20/11	

STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 3

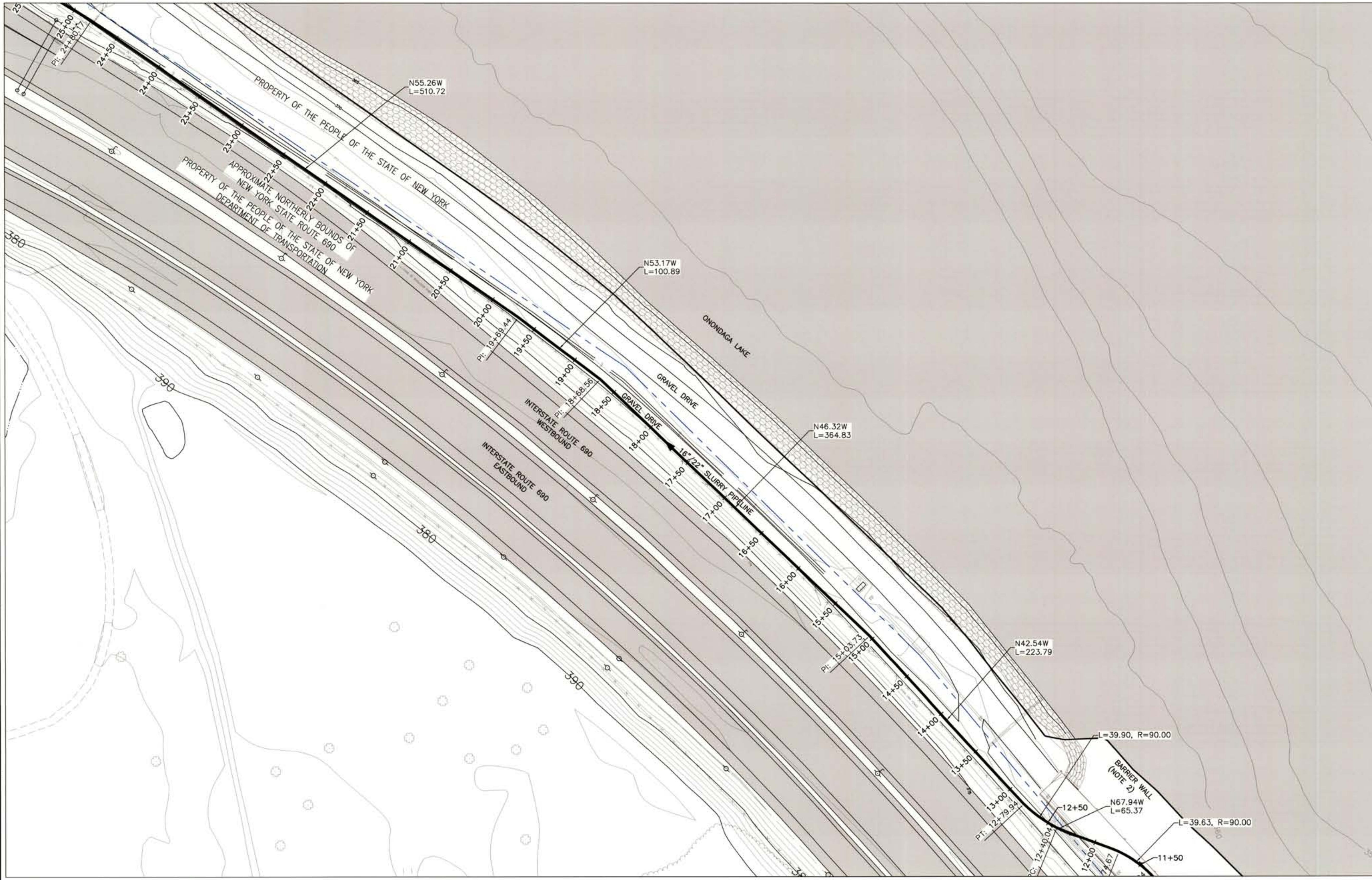
SCALE
SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

50 25 0 50 100
SCALE: 1"=50'

DRAWING NO. 444853-200-C-103
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/18/2011 8:51 AM PLOTTED BY: SIVALIA, JACK

CONTINUED ON DWG 444853-200-C-105



CONTINUED ON DWG 444853-200-C-103

50 25 0 50 100
SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. EXISTING GRADE CONTOURS PRIOR TO INSTALLATION OF BARRIER WALL ARE SHOWN. SITE MODIFICATIONS AND RESTORATION OF THIS AREA ARE IN PROGRESS.

LEGEND:

PROPERTY LINE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 5/20/11	SEAL
CHECKED BY TCD	DATE 5/20/11	
APPROVED BY DDS	DATE 5/20/11	
PROJECT MGR. PEB	DATE 5/20/11	

STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
5/20/11

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

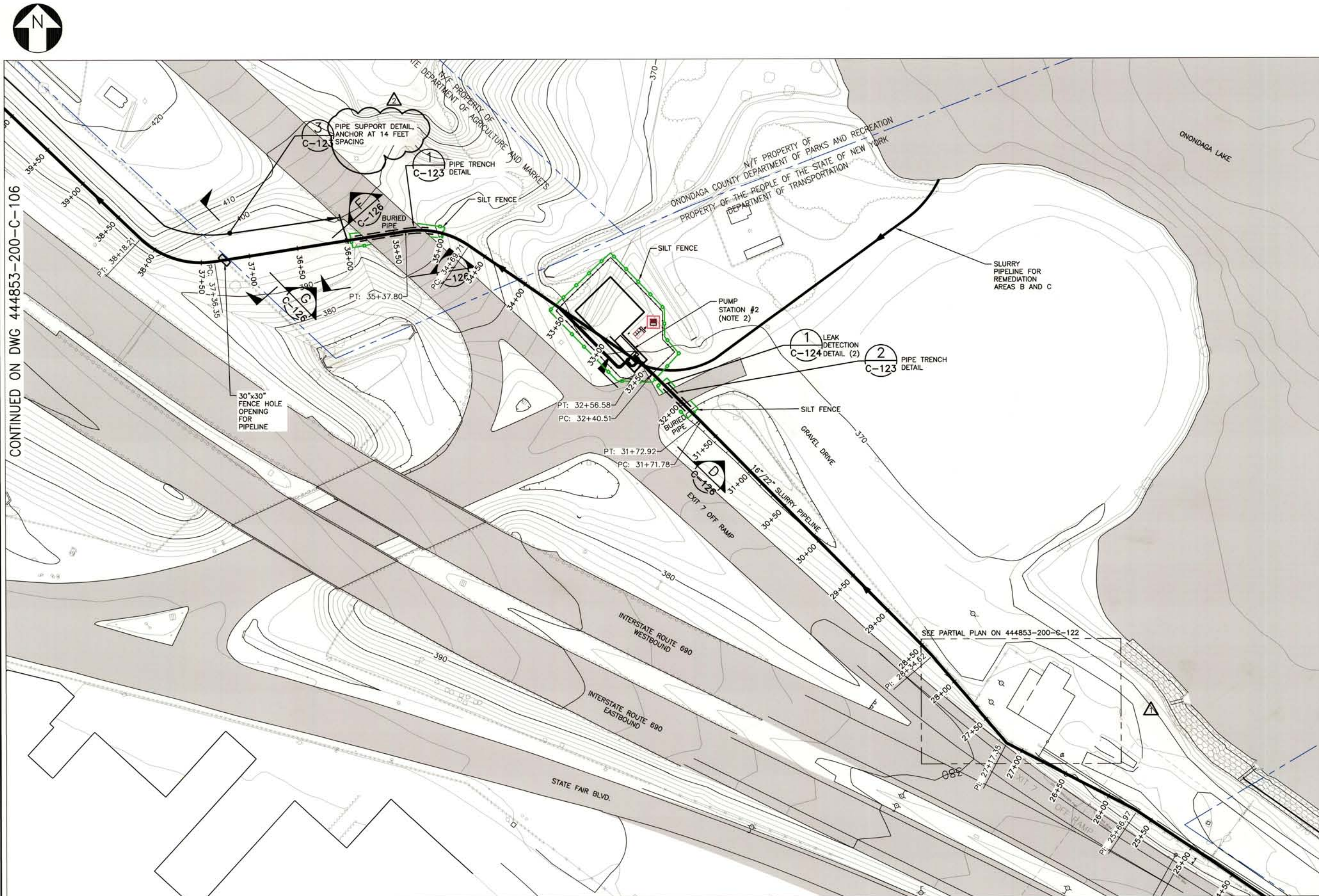
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS SHEET 4

SCALE
SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO.
444853-200-C-104

REV.
0



CONTINUED ON DWG 444853-200-C-104

50 25 0 50 100
SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE DRAWING 444853-200-C-402 FOR DETAILED CONFIGURATION AND LAYOUT OF BOOSTER PUMP STATION.
3. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.
4. SEE DRAWING 444853-200-C-406 FOR PIPELINE ANCHOR EROSION AND SEDIMENT CONTROL MEASURES NOTE.

LEGEND:

PROPERTY LINE

SILT FENCE

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
2	REVISED ANCHOR SPACING	7/29/11	JTS	TCD	DDS
1	REVISED PIPELINE ALIGNMENT	7/15/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 7/29/11	SEAL
CHECKED BY TCD	DATE 7/29/11	
APPROVED BY DDS	DATE 7/29/11	
PROJECT MGR. PEB	DATE 7/29/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 5

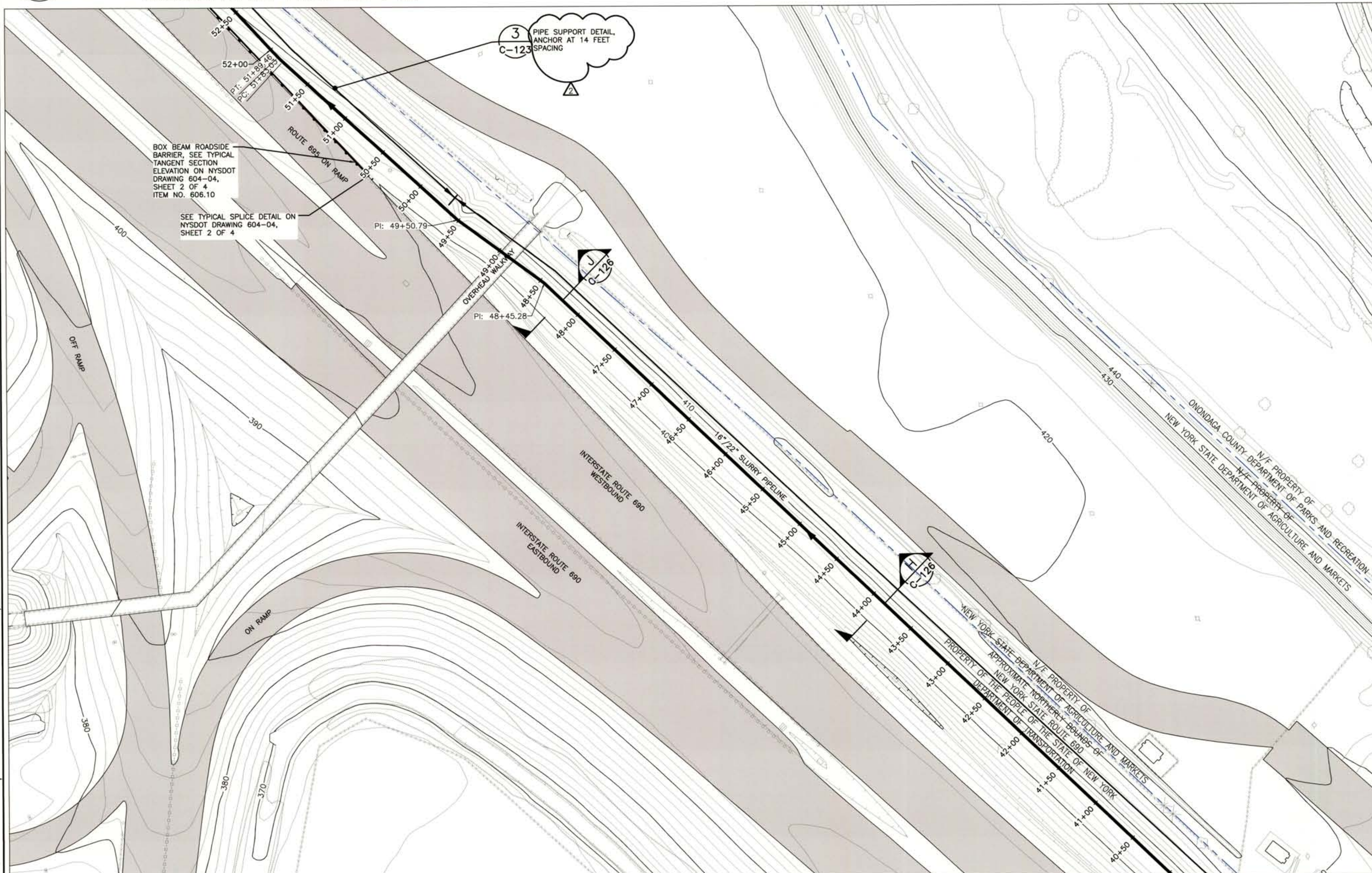
SCALE
SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-105
REV. 2

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 8/23/2011 3:36 PM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.

CONTINUED ON DWG 444853-200-C-107



CONTINUED ON DWG 444853-200-C-105

50 25 0 50 100
SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE DRAWING 444853-200-C-406 FOR PIPELINE ANCHOR EROSION AND SEDIMENT CONTROL MEASURES NOTE.
3. BOX BEAM GUIDE RAIL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION FOR GUIDE RAILS SECTION 606.
4. EXISTING SECTION TO BE REMOVED AND NEW SECTION TO BE SPLICED ON.
5. AFTER PIPELINE IS REMOVED THE GUIDE RAIL EXTENSION WILL BE REMOVED AND THE ORIGINAL END SECTION WILL BE REPLACED.
6. AFTER GUIDE RAIL AND PIPELINE HAVE BEEN REMOVED, DISTURBED AREA SHALL BE RESTORED TO NYSDOT STANDARD SPECIFICATION 107-08C.

LEGEND:

— - — - — PROPERTY LINE

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED ANCHOR SPACING	7/29/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

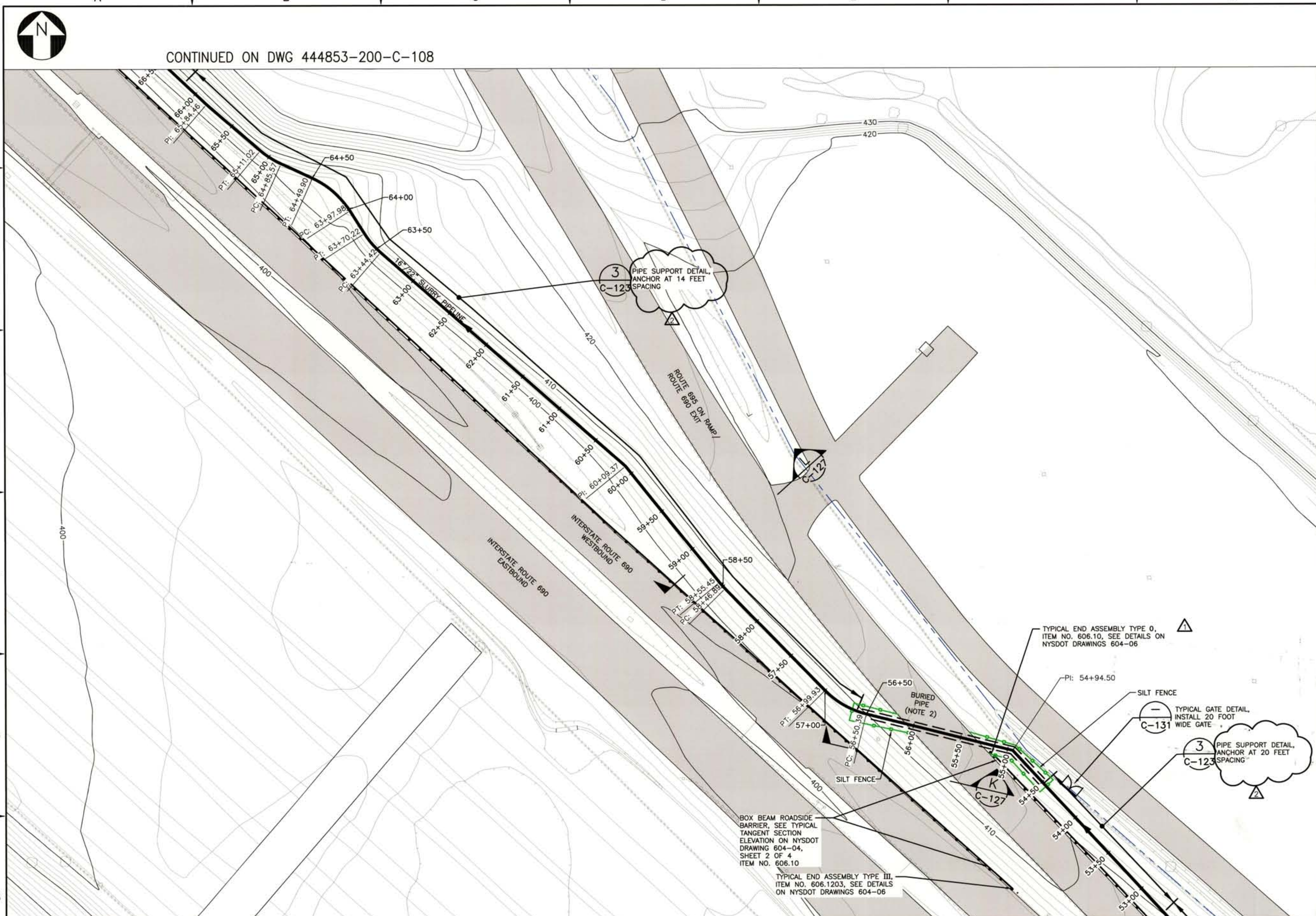
DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 6

SCALE
SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-106
REV. 1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 8/23/2011 3:47 PM PLOTTED BY: SIVALIA, JACK

CONTINUED ON DWG 444853-200-C-108



CONTINUED ON DWG 444853-200-C-106

50 25 0 50 100
SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. BURIED PIPELINE BELOW EXIT RAMP WILL BE INSTALLED USING TRENCHLESS TECHNOLOGY. DETAILED INSTALLATION WILL BE IN ACCORDANCE WITH NYSDOT REQUIREMENTS. PIPE INSTALLED USING DIRECTIONAL DRILLING WILL BE 16" DR11/24" DR11 HDPE.
3. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.
4. SEE DRAWING 444853-200-C-406 FOR PIPELINE ANCHOR EROSION AND SEDIMENT CONTROL MEASURES NOTE.
5. BOX BEAM GUIDE RAIL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION FOR GUIDE RAILS SECTION 606.
6. EXISTING SECTION TO BE REMOVED AND NEW SECTION TO BE SPLICED ON.
7. AFTER PIPELINE IS REMOVED THE GUIDE RAIL EXTENSION WILL BE REMOVED AND THE ORIGINAL END SECTION WILL BE REPLACED.
8. AFTER GUIDE RAIL AND PIPELINE HAVE BEEN REMOVED, DISTURBED AREA SHALL BE RESTORED TO NYSDOT STANDARD SPECIFICATION 107-08C.

LEGEND:

PROPERTY LINE
SILT FENCE

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
2	REVISED ANCHOR SPACING	7/29/11	JTS	TCD	DDS
1	REVISED END ASSEMBLY TYPE AND ITEM NUMBER	6/21/11	JTS	ERW	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY ERW	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

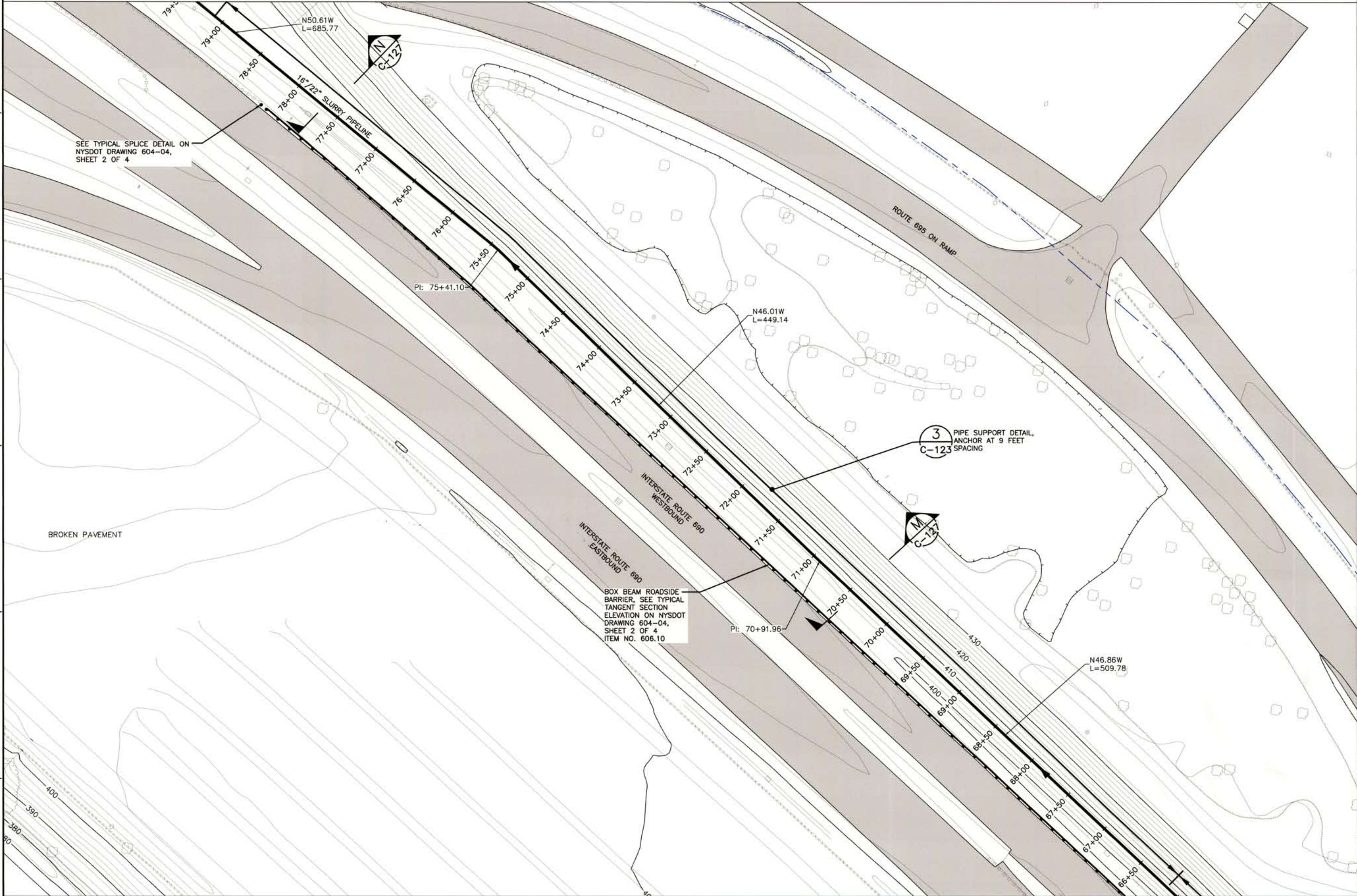
DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 7

SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-107 REV. 2

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 8/23/2011 3:56 PM PLOTTED BY: SINALIA, JACK

CONTINUED ON DWG 444853-200-C-109



CONTINUED ON DWG 444853-200-C-107

50 25 0 50 100
SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE DRAWING 444853-200-C-406 FOR PIPELINE ANCHOR EROSION AND SEDIMENT CONTROL MEASURES NOTE.
3. BOX BEAM GUIDE RAIL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION FOR GUIDE RAILS SECTION 606.
4. EXISTING SECTION TO BE REMOVED AND NEW SECTION TO BE SPLICED ON.
5. AFTER PIPELINE IS REMOVED THE GUIDE RAIL EXTENSION WILL BE REMOVED AND THE ORIGINAL END SECTION WILL BE REPLACED.
6. AFTER GUIDE RAIL AND PIPELINE HAVE BEEN REMOVED, DISTURBED AREA SHALL BE RESTORED TO NYSDOT STANDARD SPECIFICATION 107-08C.

LEGEND:

PROPERTY LINE

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 5/20/11	SEAL
CHECKED BY TCD	DATE 5/20/11	
APPROVED BY DDS	DATE 5/20/11	
PROJECT MGR. PEB	DATE 5/20/11	

STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

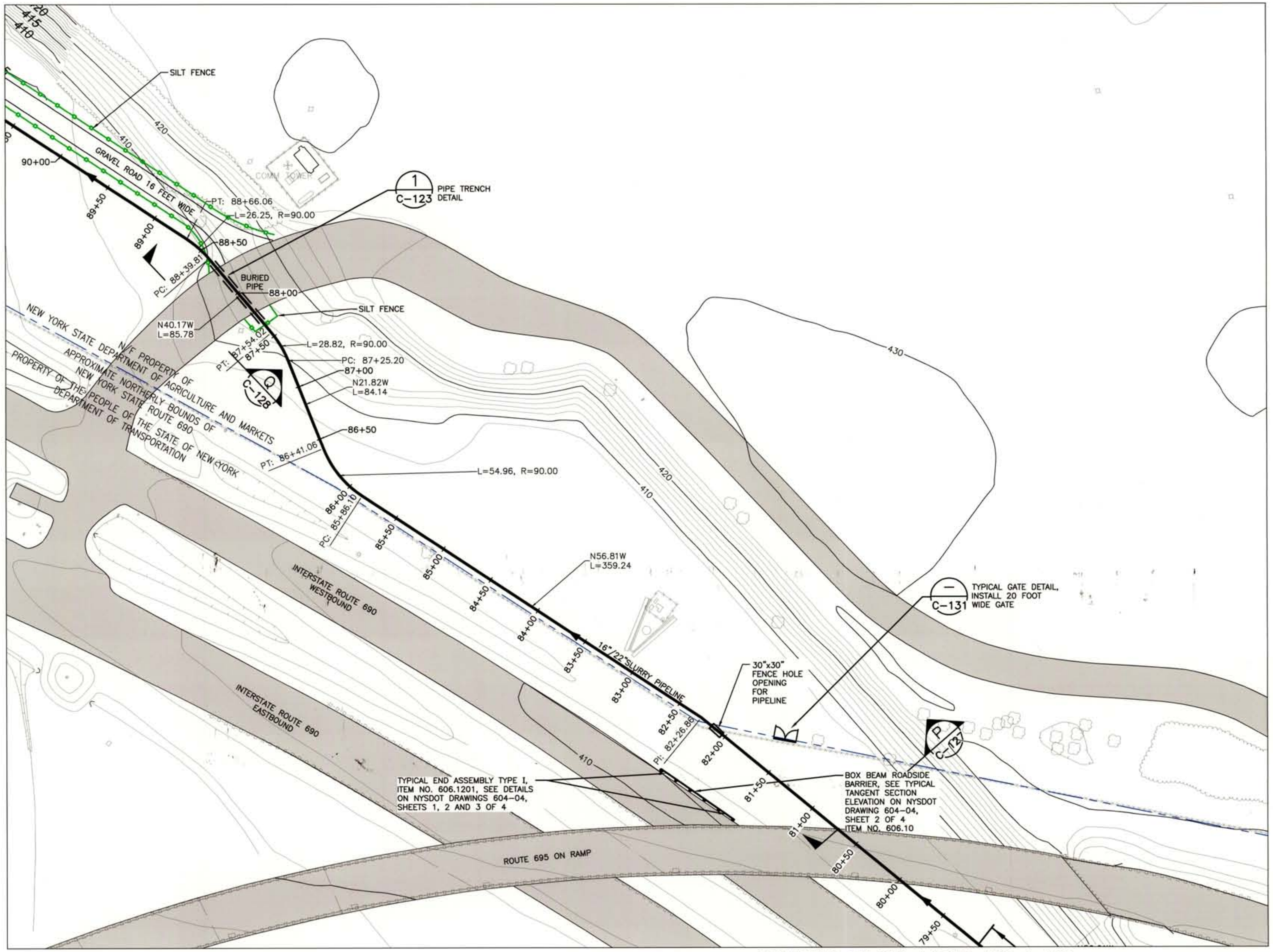
DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 8

SCALE
SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-108
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/23/2011 12:51 PM PLOTTED BY: SNALIA, JACK

CONTINUED ON DWG 444853-200-C-110



CONTINUED ON DWG 444853-200-C-108

50 25 0 50 100
SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.
3. SEE DRAWING 444853-200-C-406 FOR PIPELINE ANCHOR EROSION AND SEDIMENT CONTROL MEASURES NOTE.
4. BOX BEAM GUIDE RAIL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION FOR GUIDE RAILS SECTION 606.
5. EXISTING SECTION TO BE REMOVED AND NEW SECTION TO BE SPLICED ON.
6. AFTER PIPELINE IS REMOVED THE GUIDE RAIL EXTENSION WILL BE REMOVED AND THE ORIGINAL END SECTION WILL BE REPLACED.
7. AFTER GUIDE RAIL AND PIPELINE HAVE BEEN REMOVED, DISTURBED AREA SHALL BE RESTORED TO NYSDOT STANDARD SPECIFICATION 107-08C.

LEGEND:

PROPERTY LINE

SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

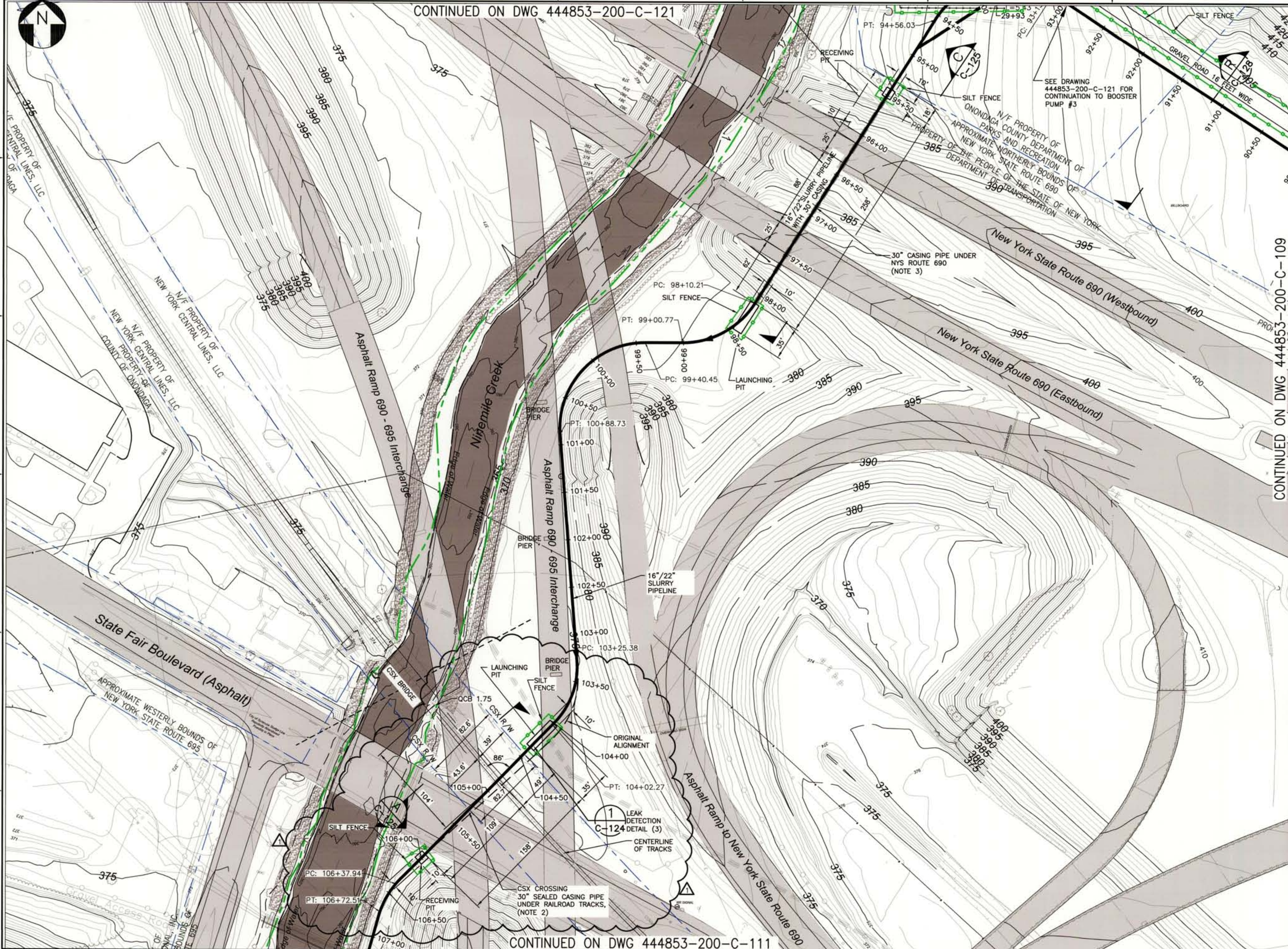
DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 9

SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-109
REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\DWG\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/23/2011 12:38 PM PLOTTED BY: SWALIA, JACK

CONTINUED ON DWG 444853-200-C-121



CONTINUED ON DWG 444853-200-C-111

CONTINUED ON DWG 444853-200-C-109

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. BURIED PIPELINE BELOW RAILROAD WILL BE INSTALLED USING TRENCHLESS TECHNOLOGY; INSTALLATION SHALL BE IN ACCORDANCE WITH CSX REQUIREMENTS.
3. BURIED PIPELINE BELOW NYS ROUTE 690 WILL BE INSTALLED USING TRENCHLESS TECHNOLOGY; INSTALLATION SHALL BE IN ACCORDANCE NYSDOT REQUIREMENTS.
4. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

PROPERTY LINE
WETLAND BOUNDARY
SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

50 25 0 50 100

SCALE: 1"=50'

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED PIPELINE ALIGNMENT AT CSX CROSSING	8-22-11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 8/22/11	SEAL
CHECKED BY TCD	DATE 8/22/11	
APPROVED BY DDS	DATE 8/22/11	
PROJECT MGR. PEB	DATE 8/22/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 10

SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-110
REV. 1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 8/23/2011 4:26 PM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.

CONTINUED ON DWG 444853-200-C-110

CONTINUED ON DWG 444853-200-C-112

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

LEGEND:

PROPERTY LINE

WETLAND BOUNDARY

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 11

SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

50 25 0 50 100
SCALE: 1"=50'

DRAWING NO. 444853-200-C-111
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/18/2011 5:00 PM PLOTTED BY: SNALIA, JACK

CONTINUED ON DWG 444853-200-C-111

CONTINUED ON DWG 444853-200-C-113

50 25 0 50 100
SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.
3. SEE DRAWING 444853-200-C-406 FOR PIPELINE ANCHOR EROSION AND SEDIMENT CONTROL MEASURES NOTE.
4. BURIED PIPELINE BELOW EXIT RAMP WILL BE INSTALLED USING TRENCHLESS TECHNOLOGY. DETAILED INSTALLATION WILL BE IN ACCORDANCE WITH NYSDOT REQUIREMENTS. PIPE INSTALLED USING DIRECTIONAL DRILLING WILL BE 16" DR11/24" DR11 HDPE.

LEGEND:

- PROPERTY LINE
- WETLAND BOUNDARY
- SILT FENCE

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

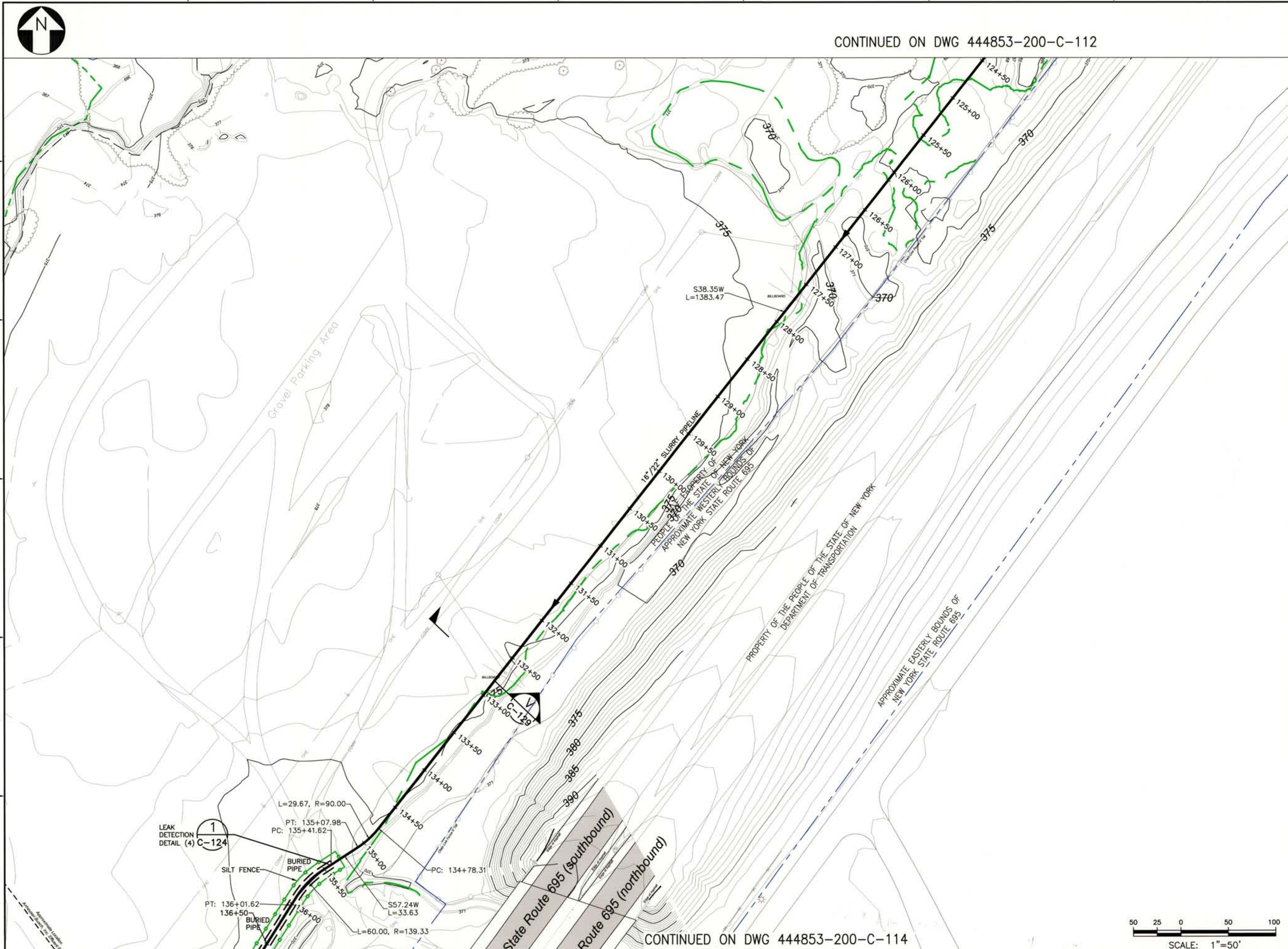
DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 12

SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-112
REV.: 0

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.

CONTINUED ON DWG 444853-200-C-112



CONTINUED ON DWG 444853-200-C-114

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

- PROPERTY LINE
- WETLAND BOUNDARY
- SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

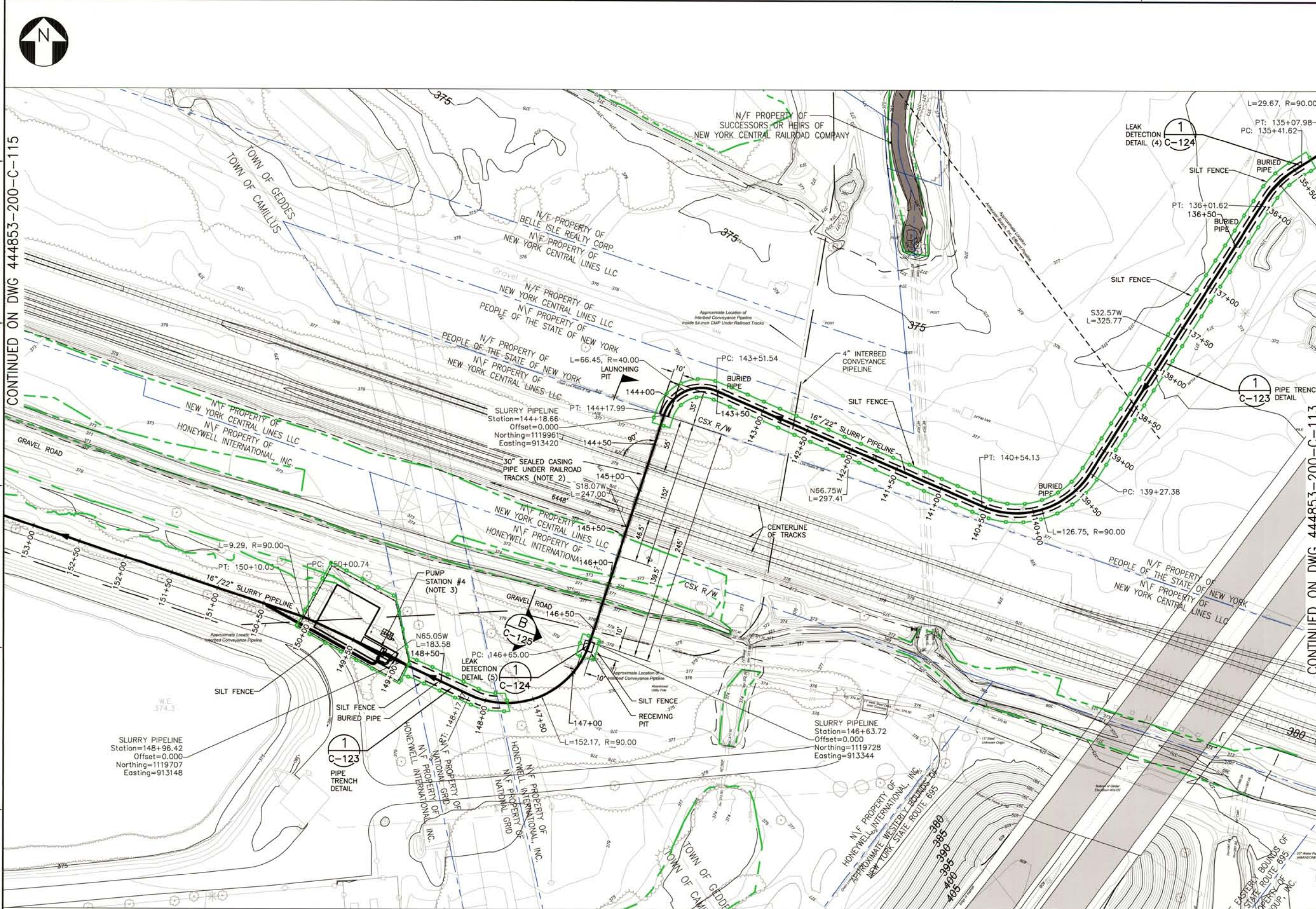
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 13

SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-113 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\DVL\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/18/2011 5:07 PM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. BURIED PIPELINE BELOW RAILROAD WILL BE INSTALLED USING TRENCHLESS TECHNOLOGY IN ACCORDANCE WITH CSX REQUIREMENTS.
3. SEE DRAWING 444853-200-C-404 FOR DETAILED CONFIGURATION AND LAYOUT OF BOOSTER PUMP STATION.
4. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

PROPERTY LINE
WETLAND BOUNDARY
SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 5/20/11	SEAL
CHECKED BY TCD	DATE 5/20/11	
APPROVED BY DDS	DATE 5/20/11	
PROJECT MGR. PEB	DATE 5/20/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB 444853
WBS 04620

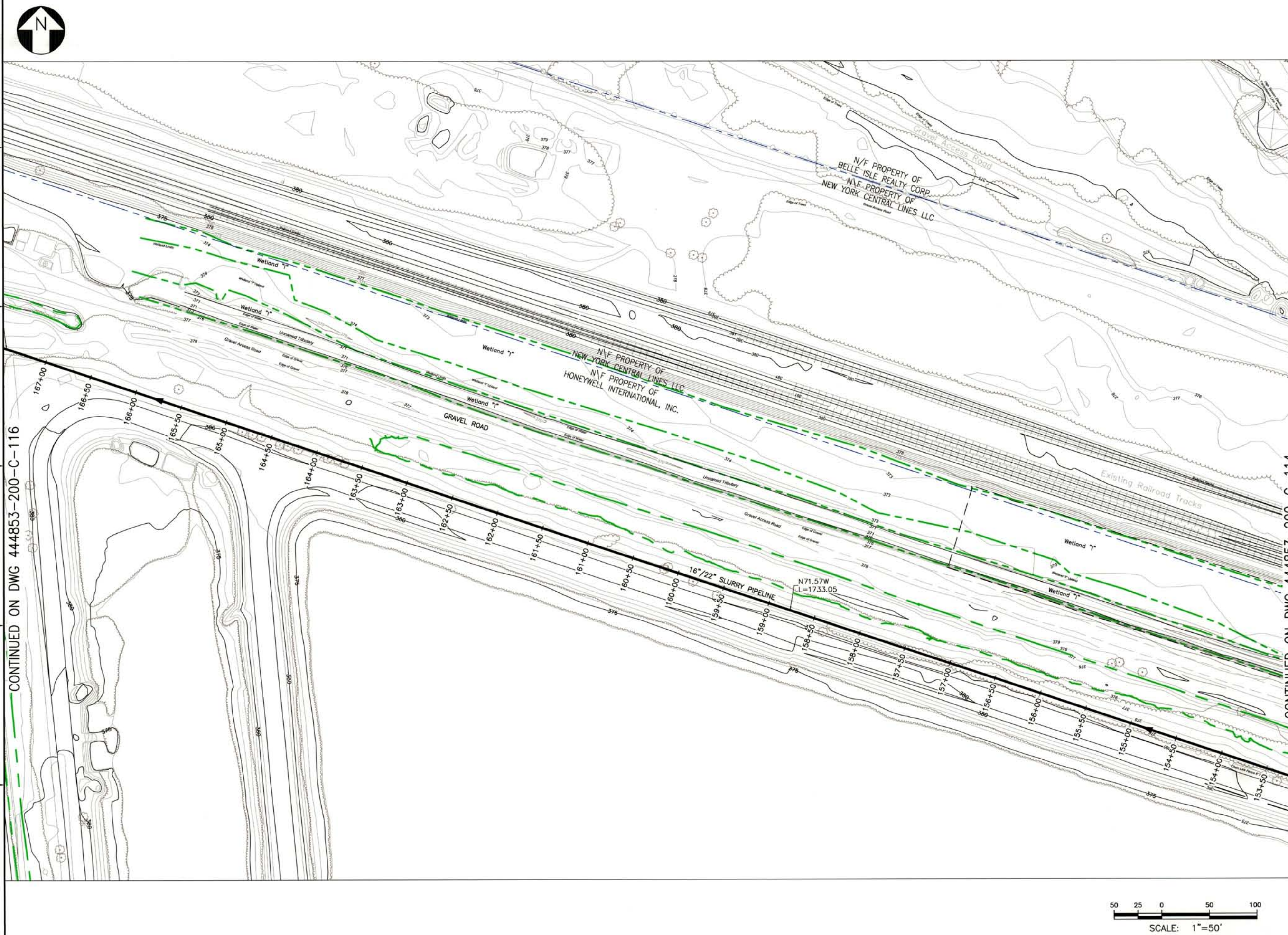
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 14

SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-114 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\DWG\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/23/2011 10:46 AM PLOTTED BY: SIVALIA, JACK



CONTINUED ON DWG 444853-200-C-116

CONTINUED ON DWG 444853-200-C-114

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

LEGEND:

PROPERTY LINE

WETLAND BOUNDARY

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560

JOB: 444853

WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

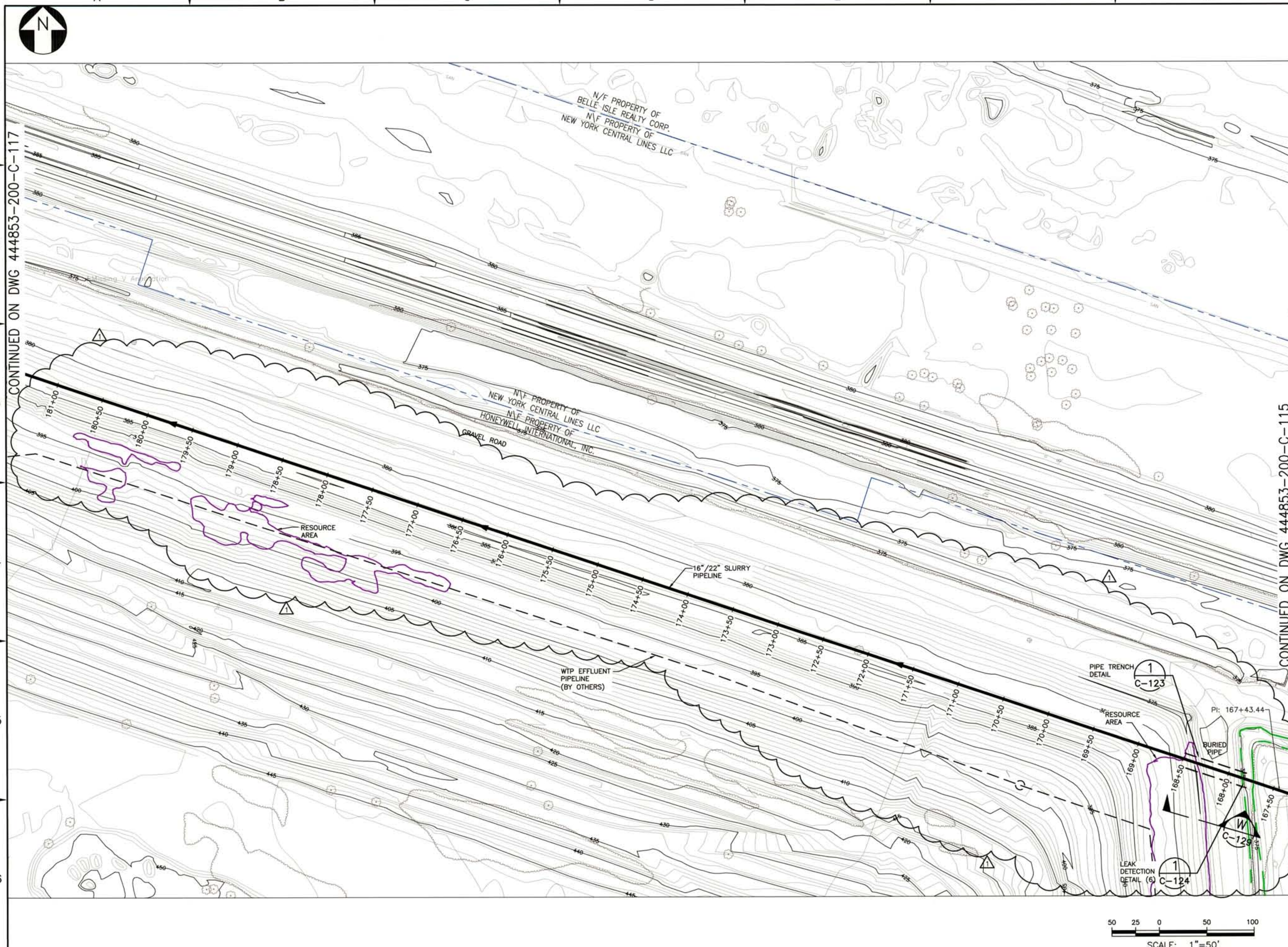
DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS SHEET 15

SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-115

REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CM\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/19/2011 8:13 AM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

LEGEND:

(dash-dot line)	PROPERTY LINE
(dashed line)	WETLAND BOUNDARY
(solid line)	RESOURCE AREA

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED PIPELINE ALIGNMENT	8/7/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	6/7/11
CHECKED BY TCD	6/7/11
APPROVED BY DDS	6/7/11
PROJECT MGR. PEB	6/7/11

SEAL: STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

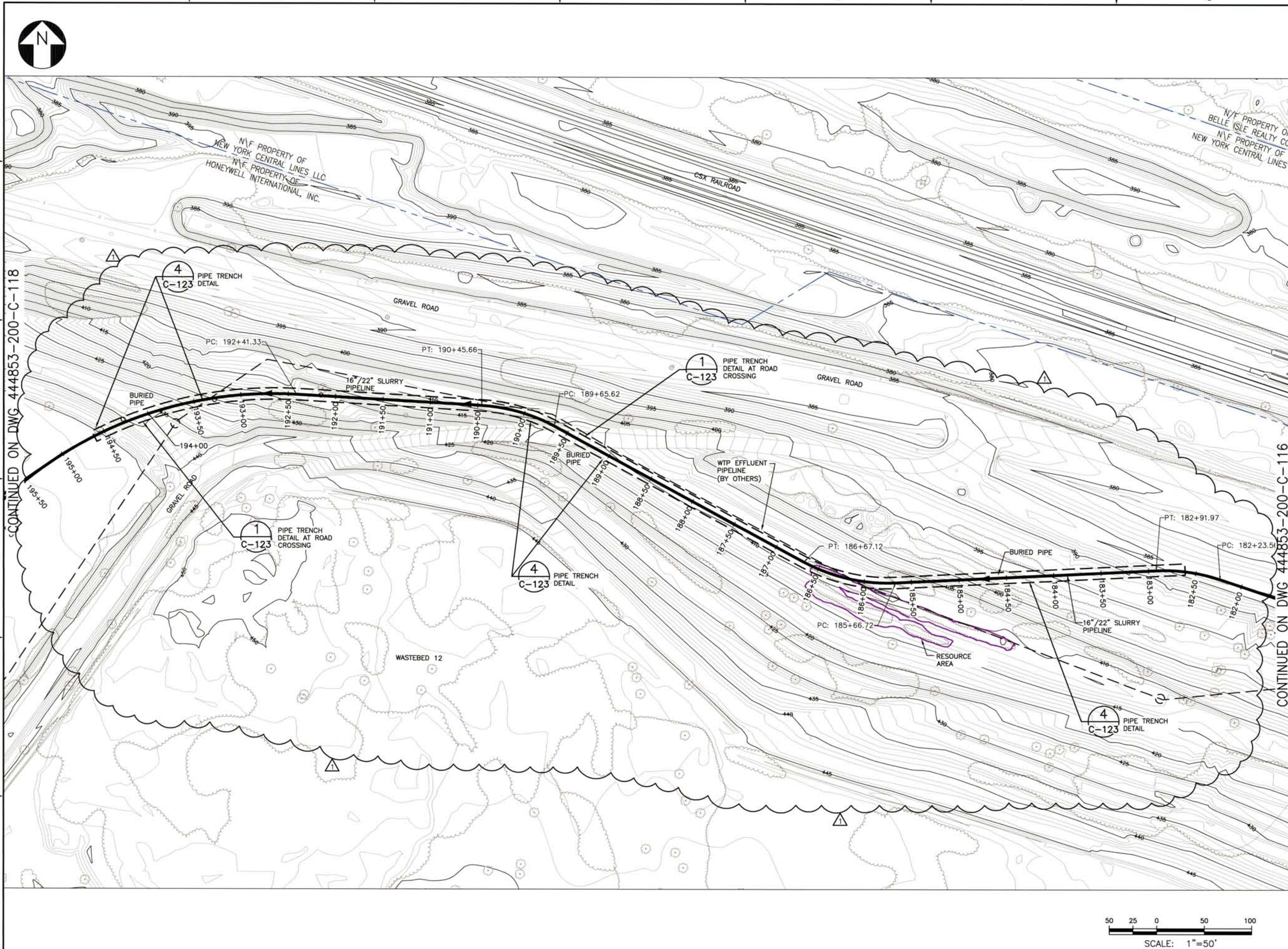
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 16

SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-116 — REV. 1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\DWL\444853-200-C-101 TO 122.DWG
PLOT DATE: 6/9/2011 11:59 AM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

LEGEND:

PROPERTY LINE
WETLAND BOUNDARY
RESOURCE AREA

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED PIPELINE ALIGNMENT	6/7/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	6/7/11
CHECKED BY TCD	6/7/11
APPROVED BY DDS	6/7/11
PROJECT MGR. PEB	6/7/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS
SHEET 17

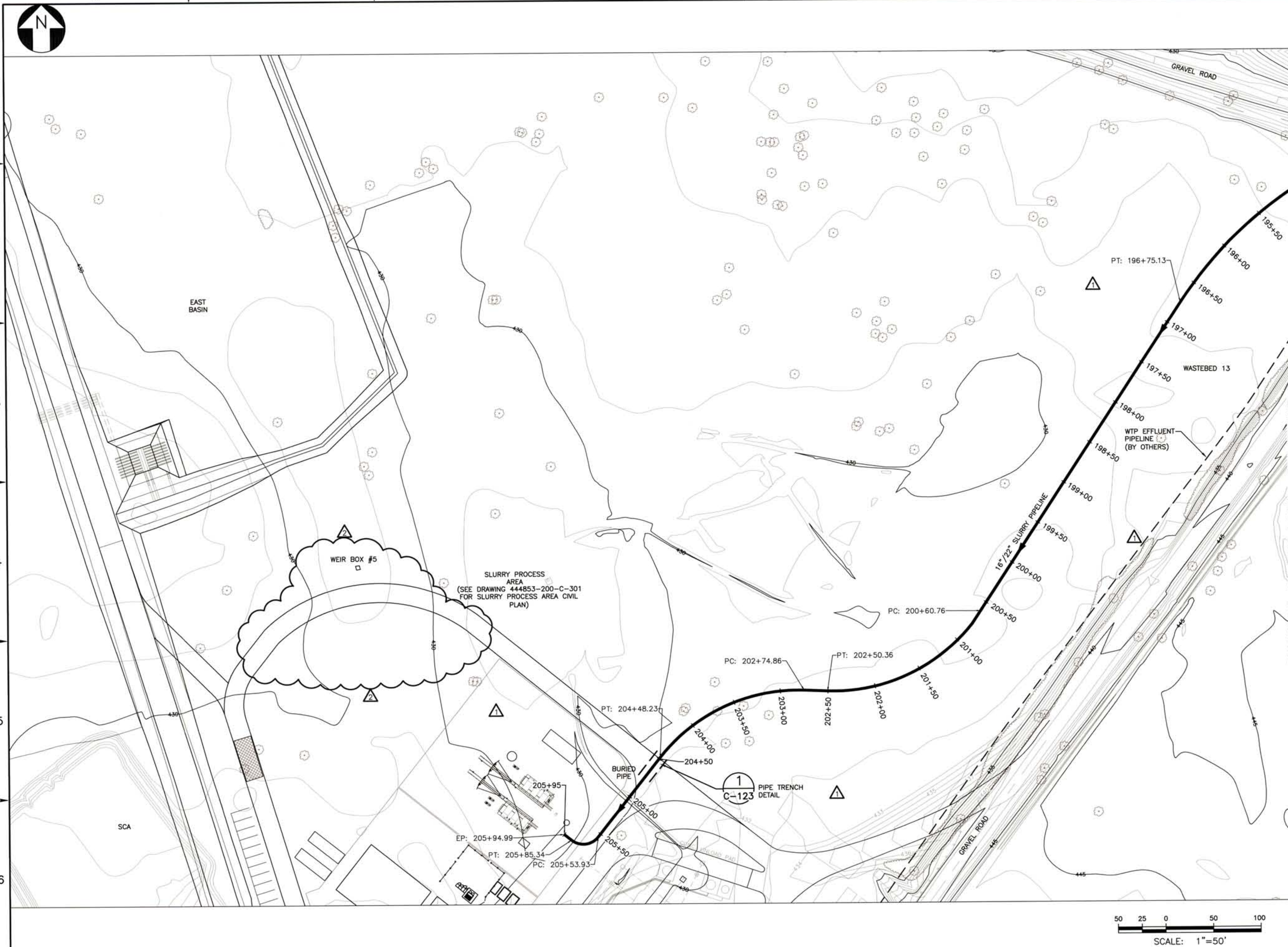
SCALE
SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO.
444853-200-C-117

REV.
1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 6/9/2011 11:55 AM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

LEGEND:

PROPERTY LINE

WETLAND BOUNDARY

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
2	REVISED ROAD ALIGNMENT	8/22/11	JTS	TCD	DDS
1	REVISED PIPELINE ALIGNMENT	6/7/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY	JTS	DATE 8/22/11
CHECKED BY	TCD	DATE 8/22/11
APPROVED BY	DDS	DATE 8/22/11
PROJECT MGR.	PEB	DATE 8/22/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853

WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT PLANS SHEET 18

SCALE
SCALE 1"= 50'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-118

REV. 2

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CM\444853-200-C-101 TO 122.DWG
PLOT DATE: 8/23/2011 4:50 PM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.

CONTINUED ON DWG 444853-200-C-120

SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

LEGEND:

PROPERTY LINE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 5/20/11
CHECKED BY TCD	DATE 5/20/11
APPROVED BY DDS	DATE 5/20/11
PROJECT MGR. PEB	DATE 5/20/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560

JOB 444853

WBS 04620

PROJECT TITLE

Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE

SLURRY PIPELINE ALIGNMENT PLANS SHEET 19

SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-119 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/19/2011 8:29 AM PLOTTED BY: SIVALIA, JACK

CONTINUED ON DWG 444853-200-C-119

CONTINUED ON DWG 444853-200-C-121

SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

LEGEND:

PROPERTY LINE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK, LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

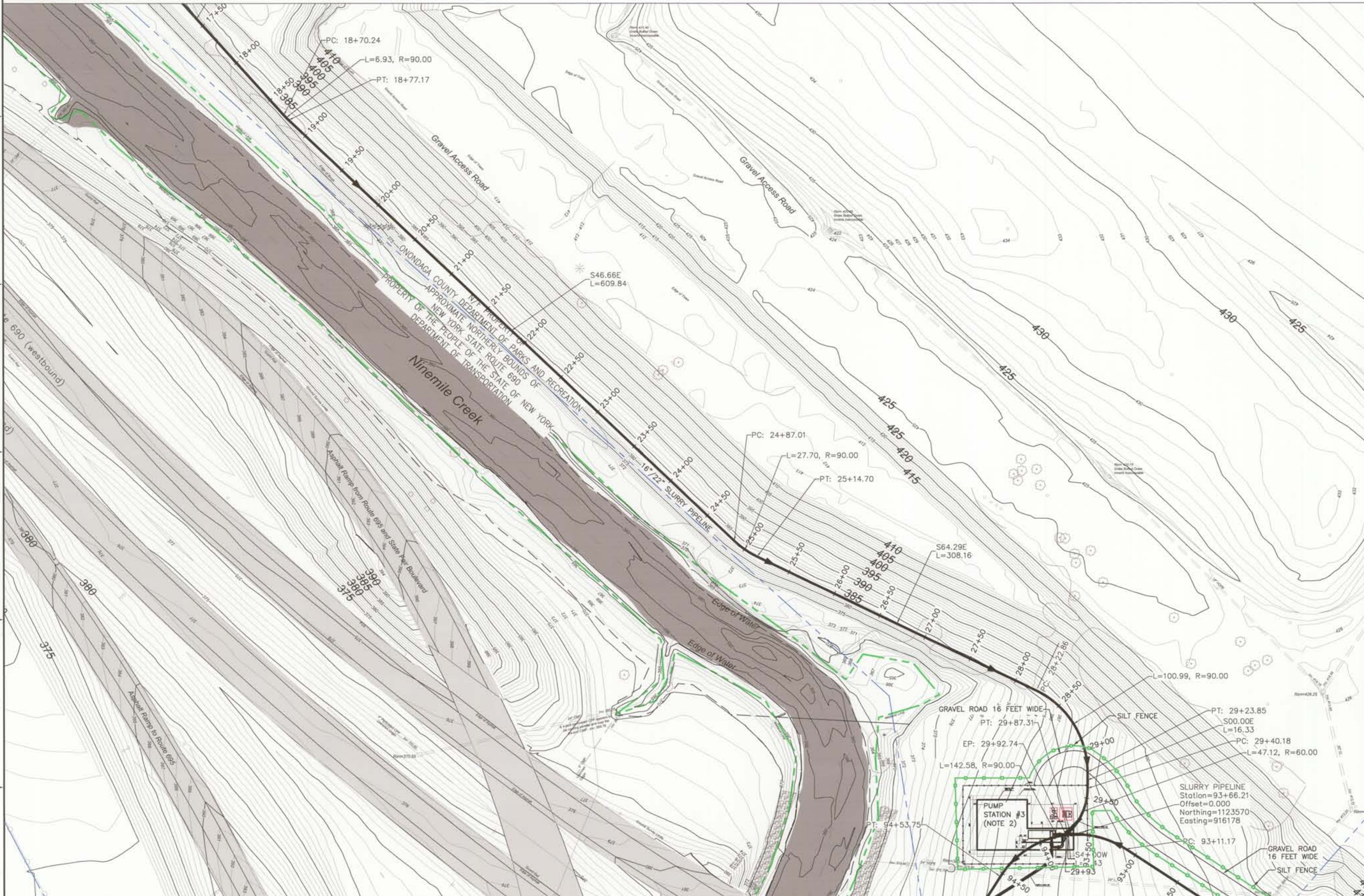
DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS SHEET 20

SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-120 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 5/19/2011 8:32 AM PLOTTED BY: SIVALIA, JACK

CONTINUED ON DWG 444853-200-C-120



CONTINUED ON DWG 444853-200-C-110

SCALE: 1"=50'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE DRAWING 444853-200-C-403 FOR DETAILED CONFIGURATION AND LAYOUT OF BOOSTER PUMP STATION.
3. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

PROPERTY LINE
SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 5/20/11	SEAL
CHECKED BY TCD	DATE 5/20/11	
APPROVED BY DDS	DATE 5/20/11	
PROJECT MGR. PEB	DATE 5/20/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT PLANS SHEET 21

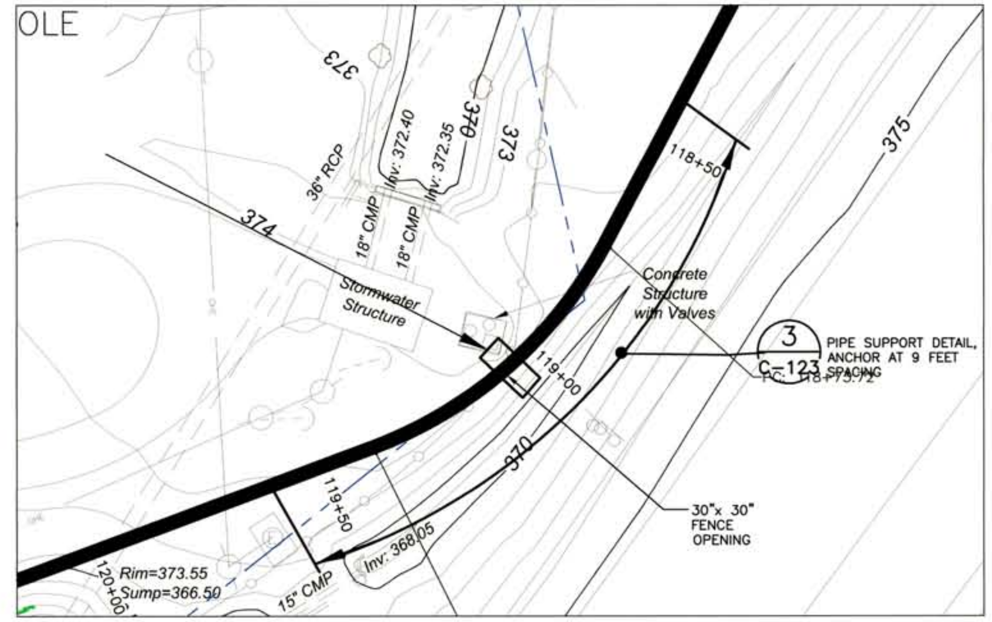
SCALE: SCALE 1"= 50' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-121 REV. 0

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.

WEST SIDE SANITARY PUMP STATION PARTIAL PLAN

(FROM DRAWING 444853-200-C-105)
SCALE: 1"=20'



STORMWATER STATION PARTIAL PLAN

(FROM DRAWING 444853-200-C-112)
SCALE: 1"=20'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

LEGEND:

PROPERTY LINE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED PIPELINE ALIGNMENT	8/22/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	8/22/11
CHECKED BY TCD	8/22/11
APPROVED BY DDS	8/22/11
PROJECT MGR. PEB	8/22/11

SEAL

STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE

Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE

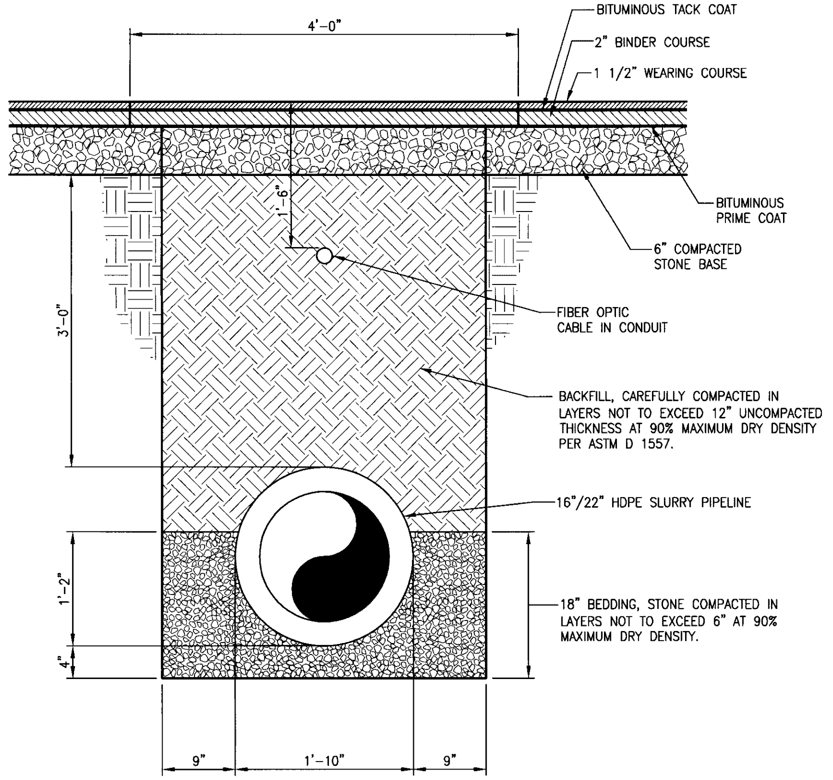
SLURRY PIPELINE ALIGNMENT
PARTIAL PLANS

SCALE
SCALE 1"= 20'
(IF PRINTED ON 22x34 SHEET)

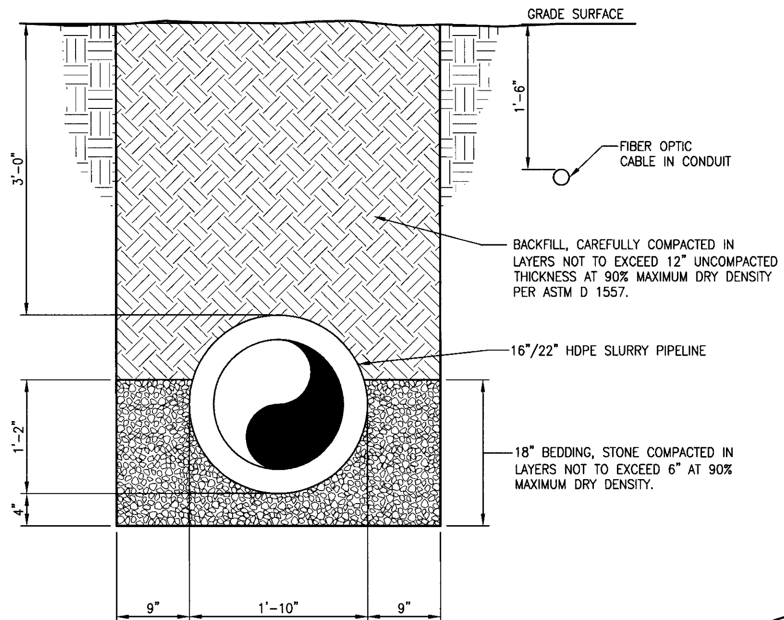
20 10 0 20 40
SCALE: 1"=20'

DRAWING NO.
444853-200-C-122
REV. 1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-101 TO 122.DWG
PLOT DATE: 8/23/2011 5:03 PM PLOTTED BY: SIVALIA, JACK

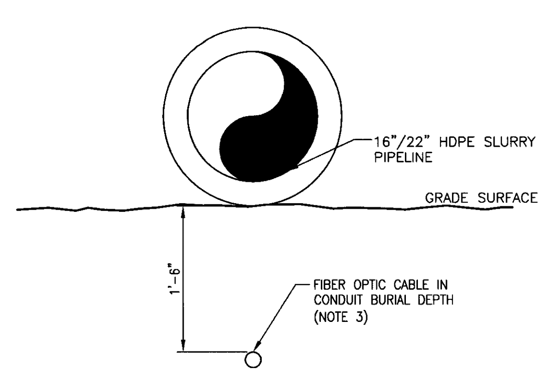


TRENCHING & PAVEMENT REPLACEMENT

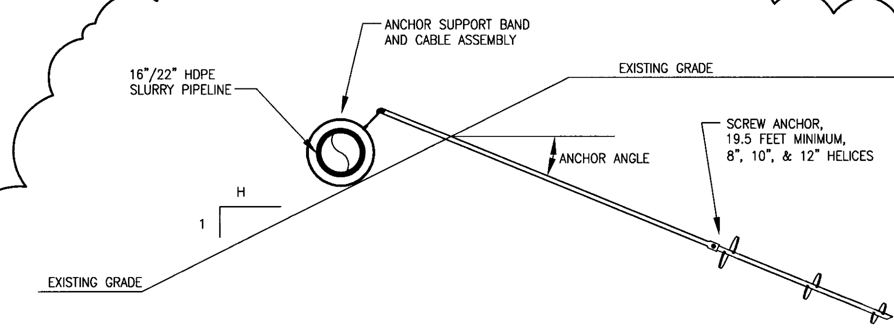


TYPICAL PIPELINE TRENCHING

DETAIL 1 VARIES
SCALE: NOT TO SCALE



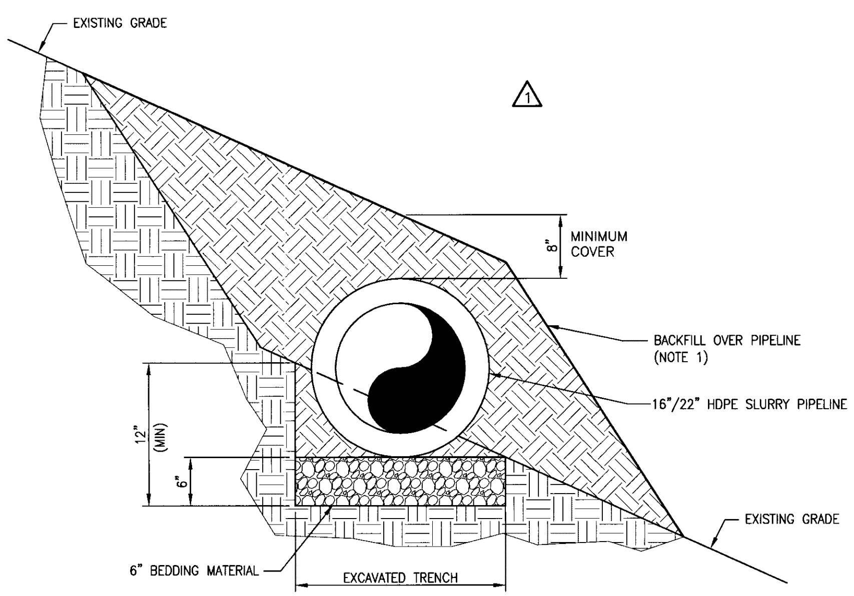
PIPELINE ON GRADE
DETAIL 2 VARIES
SCALE: NOT TO SCALE



2H:1V SLOPE: MAX SPACING=14 FT; ANCHOR ANGLE=5 DEGREE
3H:1V SLOPE: MAX SPACING=20 FT; ANCHOR ANGLE=15 DEGREE

TYPICAL ANCHOR
DETAIL 3 VARIES
SCALE: NOT TO SCALE

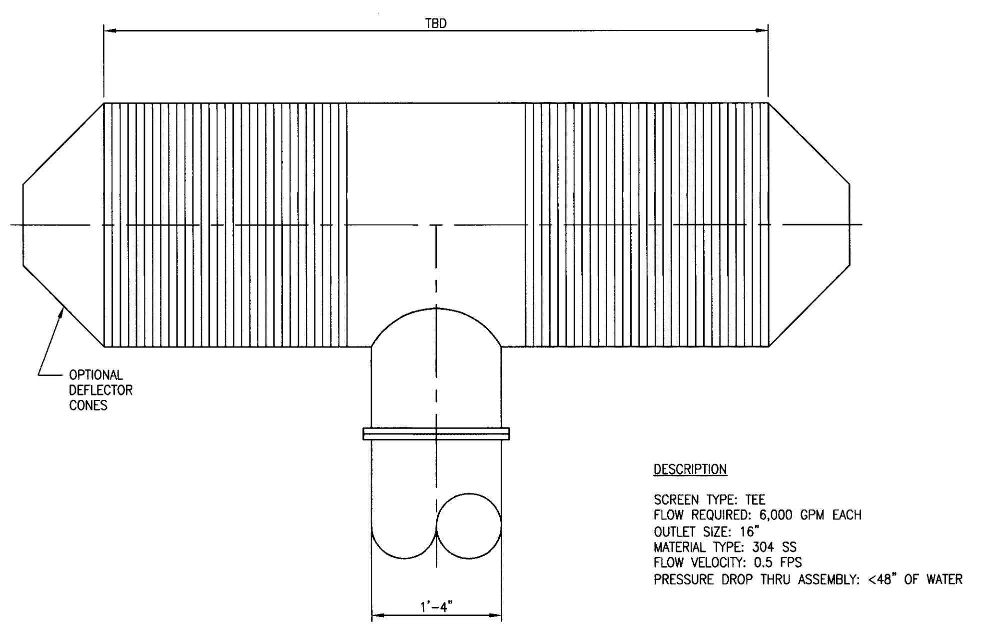
2



NOTES:

1. BACKFILL OVER PIPELINE GRADED TO MAINTAIN DRAINAGE OF SURFACE WATER.
2. ACTUAL TRENCH DEPTHS AND BACKFILL COVER THICKNESS WILL VARY BASED ON EXISTING TOPOGRAPHY.

1 PIPELINE ON SLOPE TRENCH 2
DETAIL 4 VARIES
SCALE: NOT TO SCALE



DESCRIPTION

SCREEN TYPE: TEE
FLOW REQUIRED: 6,000 GPM EACH
OUTLET SIZE: 16"
MATERIAL TYPE: 304 SS
FLOW VELOCITY: 0.5 FPS
PRESSURE DROP THRU ASSEMBLY: <48" OF WATER

PUMP SUCTION TEE MANIFOLD
DETAIL 5 C-401
SCALE: NOT TO SCALE

2

NOTES:

1. FIBER OPTIC CABLE TO FOLLOW ROUTE OF SLURRY LINE IN HDPE CONDUIT.
2. DELETED 2
3. FIBER OPTIC CABLE IN CONDUIT BURIED OR ON GRADE, DEPENDING ON SITE CONSIDERATIONS.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
2	ADDED DETAIL	7/29/11	JHG	TCD	DDS
1	ADDED TRENCH DETAIL	6/7/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

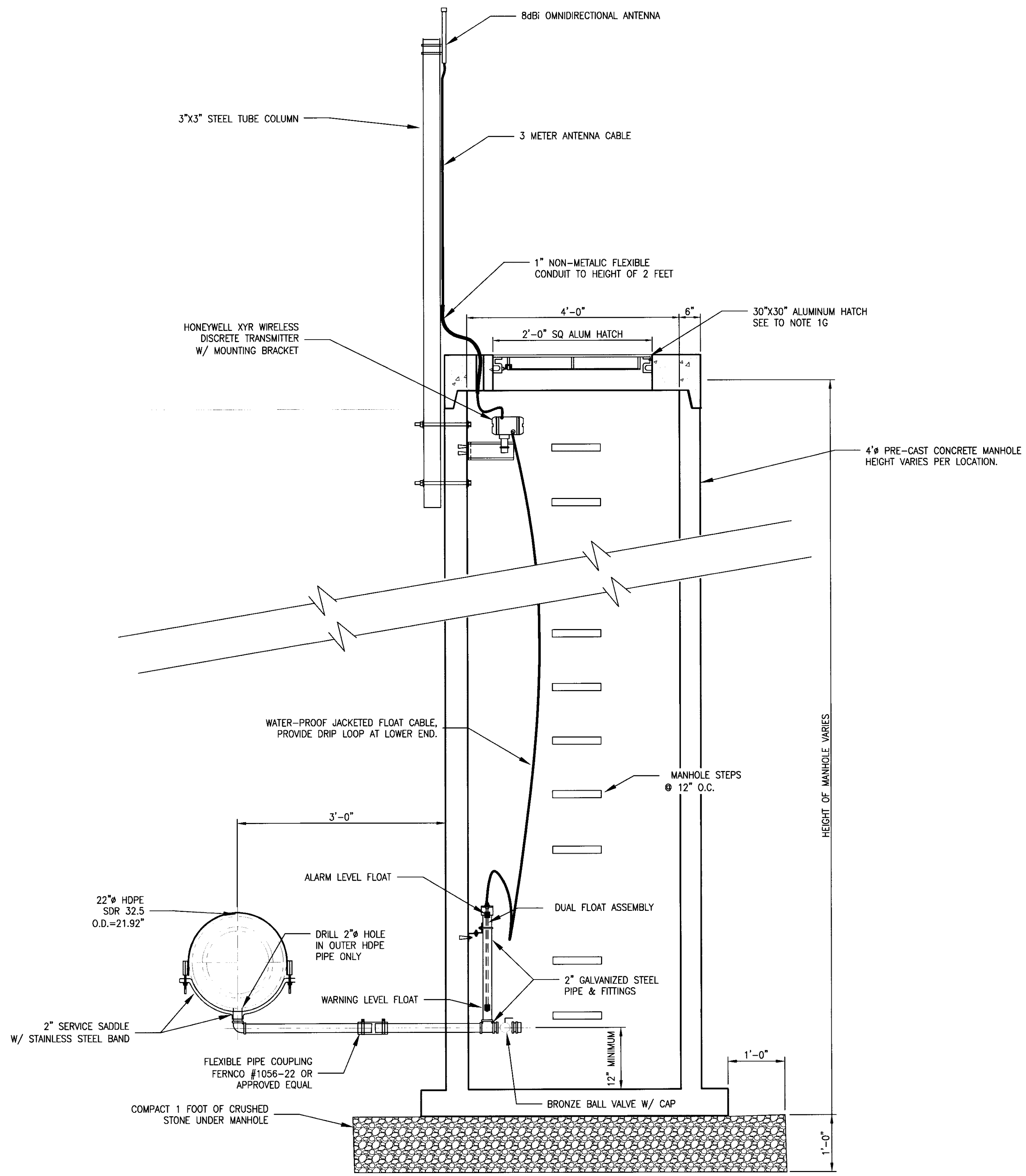
JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT
SECTIONS AND DETAILS

SCALE: SCALE AS NOTED (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-123 REV. 2

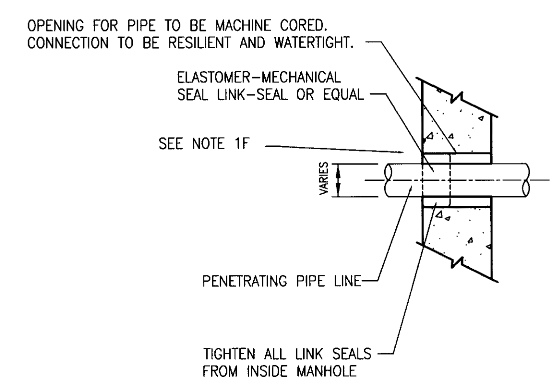


LEAK DETECTION FOR UNDERGROUND PIPE DETAIL 1 VARIES

SCALE: NOT TO SCALE

LEAK DETECTION NOTES:

1. LEAK DETECTION REQUIRED AT APPROXIMATE PIPELINE STATIONS 1+05, 33+75, 105+30, 136+90, 148+15 & 169+30.
2. PRE CAST MANHOLE SHALL BE A KISTNER 4-FOOT DIAMETER SANITARY MANHOLE OR APPROVED EQUAL:
   A. MANHOLES DESIGN SPECIFICATION SHALL CONFORM TO A.S.T.M. C478 WITH SINGLE POUR MONOLITHIC BASE SECTION.
   B. REINFORCING STEEL CONFORMS TO A.S.T.M. A185; 0.12 SQ. IN. / LINEAL FT. AND 0.12 SQ. IN. EACH WAY IN BASE SLAB.
   C. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI.
   D. MANHOLE RING-JOINT SEALS SHALL BE A FACTORY LUBED OFFSET GASKET CONFORMING TO A.S.T.M. C443. INSIDE AND OUTSIDE JOINT GAPS SHALL BE FURTHER SEALED WITH A COAL TAR BITUMASTIC SEALING COMPOUND.
   E. MANHOLE STEPS SHALL BE A 1/2-INCH, GRADE 60, STEEL BAR MOLDED IN A COPOLYMER POLYPROPYLENE PLASTIC IN ACCORDANCE WITH A.S.T.M. C478 PARA. 11, WITH A MINIMUM VERTICAL DESIGN LOAD RATING OF 800 LBS.
   F. 2-INCH PIPE CONNECTION, CORE A 3.5-INCH HOLE, USE A LINK-SEAL MODEL LS-200-C-8 MECHANICAL SEAL.
   G. ALUMINUM ACCESS HATCHES OF THE SIZE SHOWN ON THE DRAWING, SHALL BE SYRACUSE. CASTINGS EC-4 HD STYLE AND ECD-12 ECD STYLE (FOR VALVE VAULT), OR APPROVED EQUAL; HEAVY DUTY DESIGN H-20 LOAD RATING 300 PSF FROM 1/4-INCH GRADE 5086 CHECKER PLATE WITH GRADE 6061-T6 ALUMINUM BARS AND ANGLE SUPPORTS, EXPOSED PADLOCK CLIP, HEAVY DUTY HINGES, HOLD OPEN ARM.
   H. OUTSIDE CONCRETE SURFACES FROM TOP SLAB TO BOTTOM INCLUDING UNDERSIDE OF BASE SLAB SHALL BE COATED WITH A COAL TAR EPOXY COATING, EQUAL TO INTERNATIONAL INTERTUF 132 OR APPROVED EQUAL. APPLY PER MANUFACTURERS' RECOMMENDATIONS; NUMBER OF COATS AS REQUIRED TO ACHIEVE A WET COAT THICKNESS GREATER THAN 8 MILS.
2. FLOAT ASSEMBLY: GEMS SENSORS & CONTROLS SERIES LS-300TFE OR APPROVED EQUAL
   A. ALL PTFE WETTED PARTS FACTORY ASSEMBLED W/ #22 AWG PVC JACKETED WIRE CABLE
   B. DUAL FLOAT ACTUATION 18" APART ON 24" PTFE ROD.
   C. TYPE 22, 1" NPT PROCESS CONNECTION W/ TYPE 3 LIQUID-TIGHT CABLE GLAND.
3. WIRELESS TRANSMITTER: HONEYWELL XYR 6000 DISCRETE INPUT TRANSMITTER.
   A. POWERED BY INTERNAL "D" SIZED LITHIUM BATTERIES
   B. 125 mW MAXIMUM TRANSMIT POWER
   C. REMOTE ANTENNA, 8dBi OMNIDIRECTIONAL W/ 3 METER CABLE AND LIGHTNING ARRESTER.
   D. TRANSMITS TO BASE STATION AT BOOSTER PUMP STATIONS.



2" PIPE PENETRATION DETAIL

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY: JTS	DATE: 5/20/11
CHECKED BY: TCD	DATE: 5/20/11
APPROVED BY: DDS	DATE: 5/20/11
PROJECT MGR.: PEB	DATE: 5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB: 444853
WBS: 04620

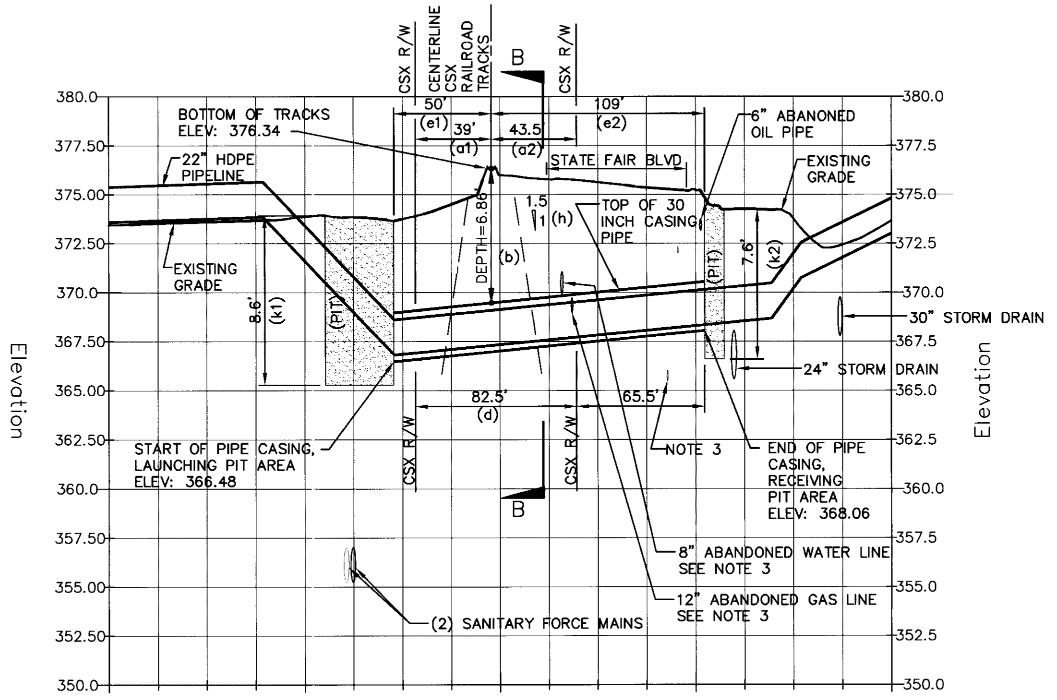
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT
LEAK DETECTION DETAILS

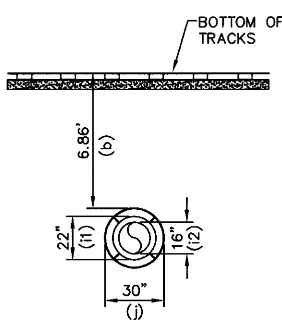
SCALE: NO SCALE

DRAWING NO.: 444853-200-C-124
REV.: 0

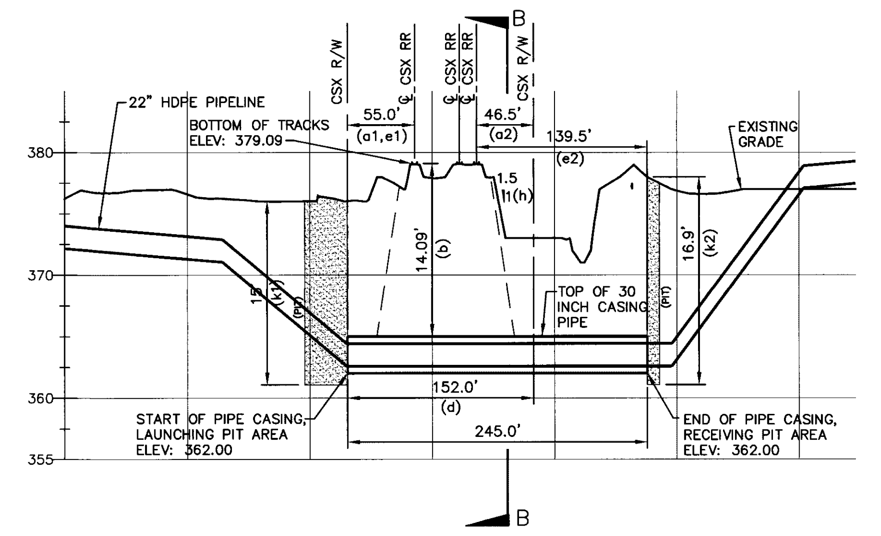
FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-124.DWG
PLOT DATE: 5/23/2011 2:15 PM PLOTTED BY: SIVALIA, JACK



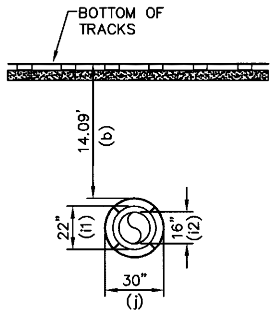
CSX CROSSING 1 PROFILE
SECTION A C-110
SCALE: HORIZ. 1"=50' VERT. 1"=5'



SECTION VIEW B-B
(NTS)

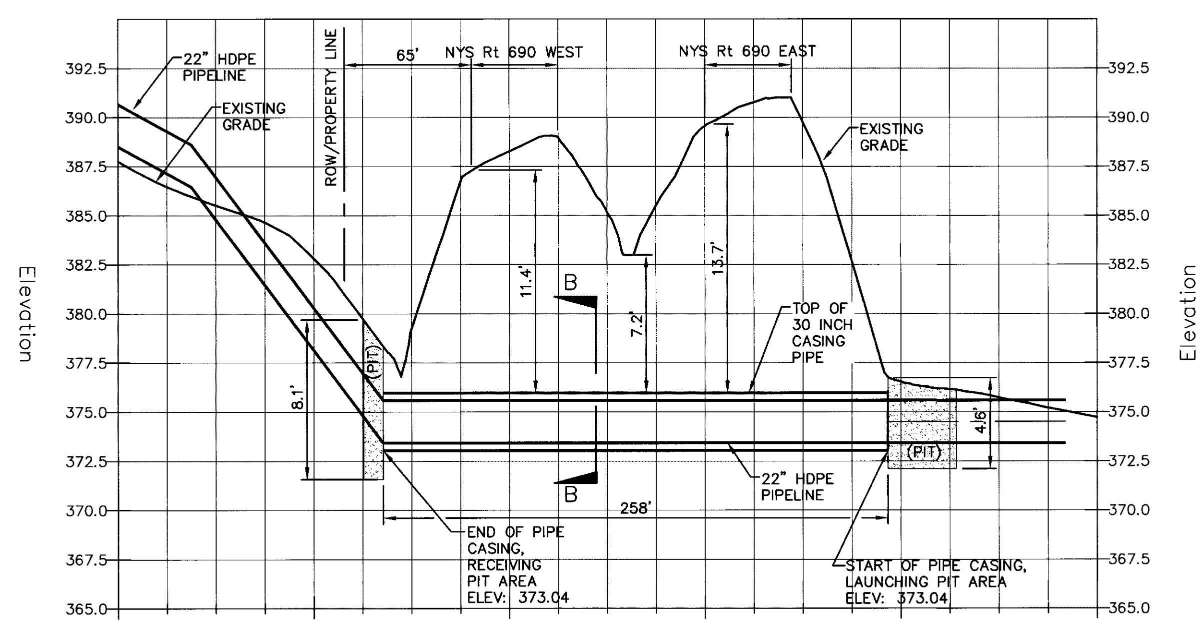


CSX CROSSING 2 PROFILE
SECTION B C-114
SCALE: HORIZ. 1"=80' VERT. 1"=8'

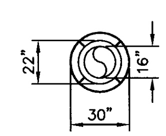


SECTION VIEW B-B
(NTS)

SECTIONS A AND B – LETTER DESCRIPTIONS
(a1), (a2) DISTANCE FROM CENTERLINE OF TRACKS TO CSX R/W.
(b) DISTANCE FROM BASE-OF-RAIL TO TOP OF CASING.
(c) N/A, BASE-OF-DITCH TO TOP OF CASING.
(d) TOTAL LENGTH OF PIPE ON CSX R/W.
(e1), (e2) DISTANCE FROM CENTERLINE OF NEAREST TRACK TO THE FACE OF PITS, AT A 90 DEGREE ANGLE TO THE TRACKS.
(f) N/A, DISTANCE FROM TOP-OF-VENT PIPE TO GROUND SURFACE. (NOT VENTED)
(g) N/A, DISTANCE FROM CENTERLINE OF TRACKS TO VENT PIPE. (NOT VENTED)
(h) THEORETICAL EMBANKMENT LINE: STARTS 12' FROM CENTERLINE OF TRACKS AND EXTENDS AWAY FROM TRACKS AT A SLOPE OF 1.5' OVER AND 1' DOWN.
(i1), (i2) PRIMARY AND SECONDARY CARRIER PIPE DIAMETERS.
(j) CASING PIPE DIAMETER.
(k1) (k2) DEPTH OF LAUNCHING AND RECEIVING PITS.



NYS ROUTE 690 PROFILE
SECTION C C-110
SCALE: HORIZ. 1"=50' VERT. 1"=5'



SECTION VIEW B-B
(NTS)

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. BURIED PIPELINE BELOW RAILROAD WILL BE INSTALLED USING TRENCHLESS TECHNOLOGY. DETAILED INSTALLATION WILL BE ADDRESSED IN THE FINAL DESIGN DOCUMENTS AND WILL BE IN ACCORDANCE WITH CSX REQUIREMENTS.
3. ESTIMATED LOCATION OF ABANDONED UTILITIES FROM NYSDOT RECORD DRAWINGS (1970, FASH 71-3, FIRC 71-51).
4. ONCE PIPELINE IS PULLED/FUSED THE PITS WILL BE FILLED WITH NATIVE SOIL AND COMPACTED TO AN APPROVED DENSITY WITH THE UPPER SURFACE MAINTAINED FLUSH WITH THE ORIGINAL SURFACE FOLLOWING NYSDOT STANDARD SPEC 203.
5. PARSONS WILL RESTORE SITE CONDITIONS.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

80 40 0 80 160
SCALE: 1"=80'

50 25 0 50 100
SCALE: 1"=50'

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

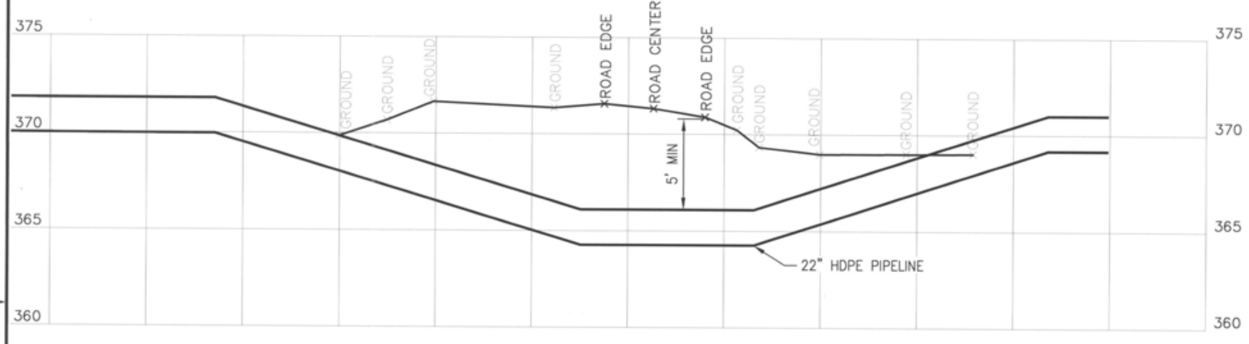
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE ALIGNMENT
SECTIONS AND PROFILES
SHEET 1 OF 5

SCALE
SCALE AS NOTED
(IF PRINTED ON 22x34 SHEET)

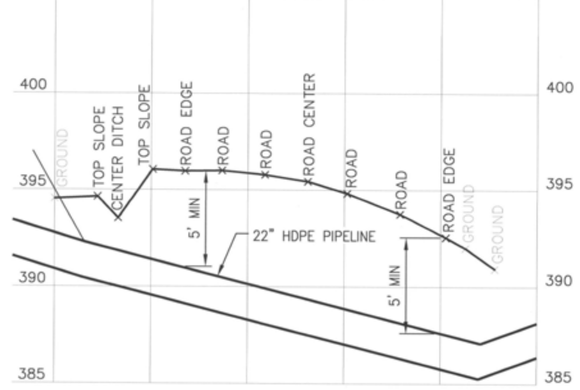
DRAWING NO. 444853-200-C-125
REV. 0

Transect 1



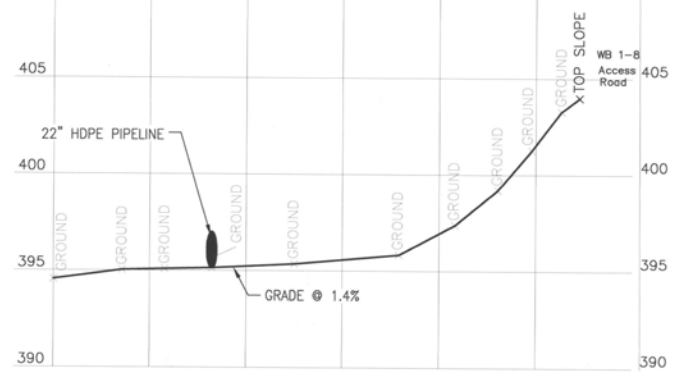
SECTION D / C-105
SCALE: HORIZ. 1"=20' VERT. 1"=5'

Transect 2



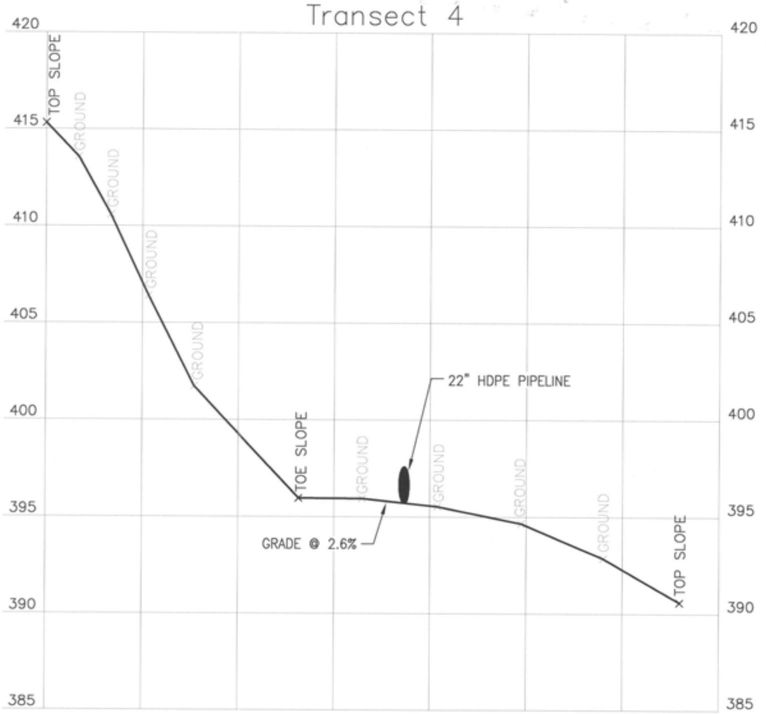
SECTION E / C-105
SCALE: HORIZ. 1"=20' VERT. 1"=5'

Transect 3



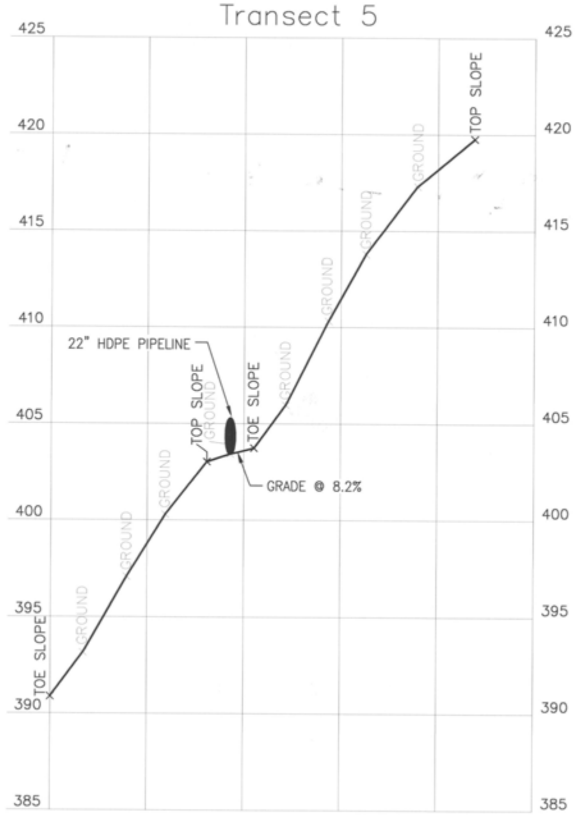
SECTION F / C-105
SCALE: HORIZ. 1"=20' VERT. 1"=5'

Transect 4



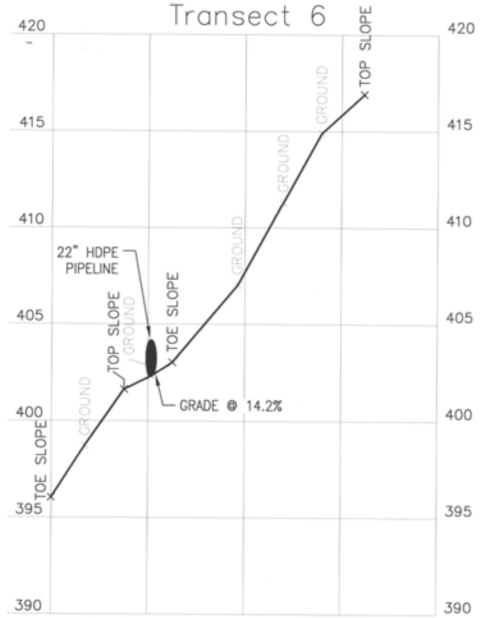
SECTION G / C-105
SCALE: HORIZ. 1"=20' VERT. 1"=5'

Transect 5



SECTION H / C-106
SCALE: HORIZ. 1"=20' VERT. 1"=5'

Transect 6



SECTION J / C-106
SCALE: HORIZ. 1"=20' VERT. 1"=5'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

5 2.5 0 5 10
SCALE: 1"=5'

20 10 0 20 40
SCALE: 1"=20'

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APP'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

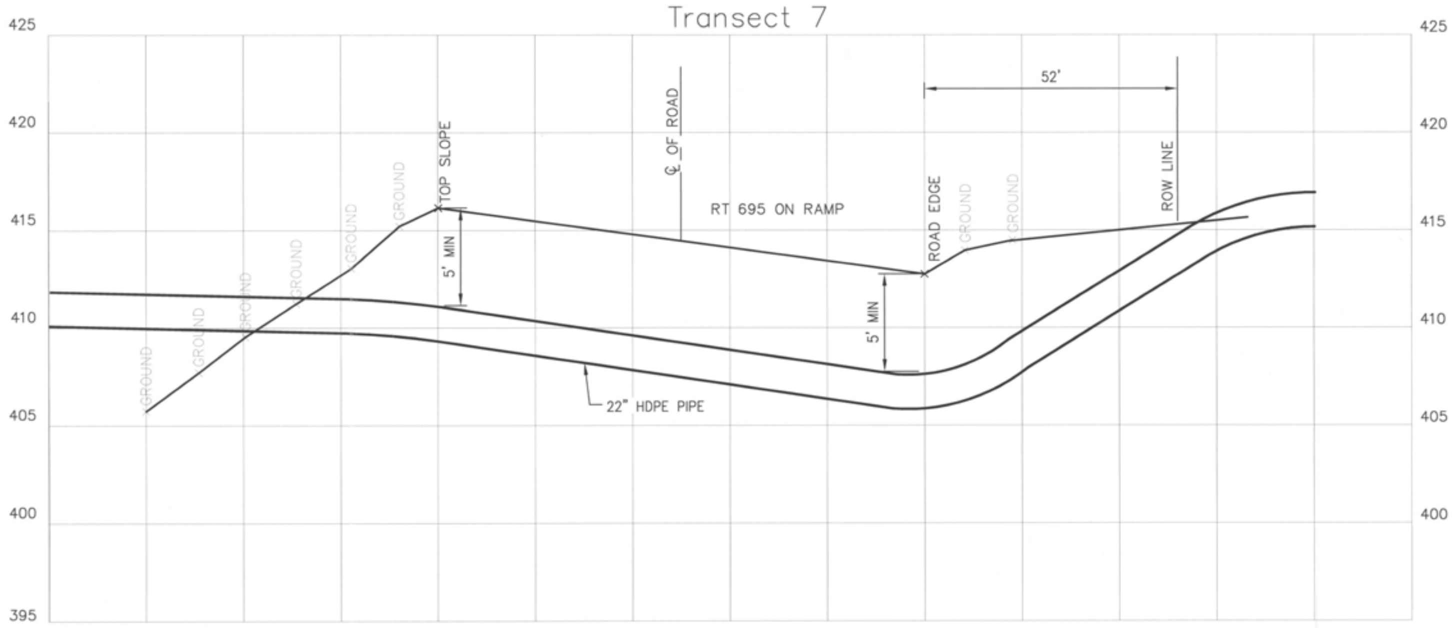
OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

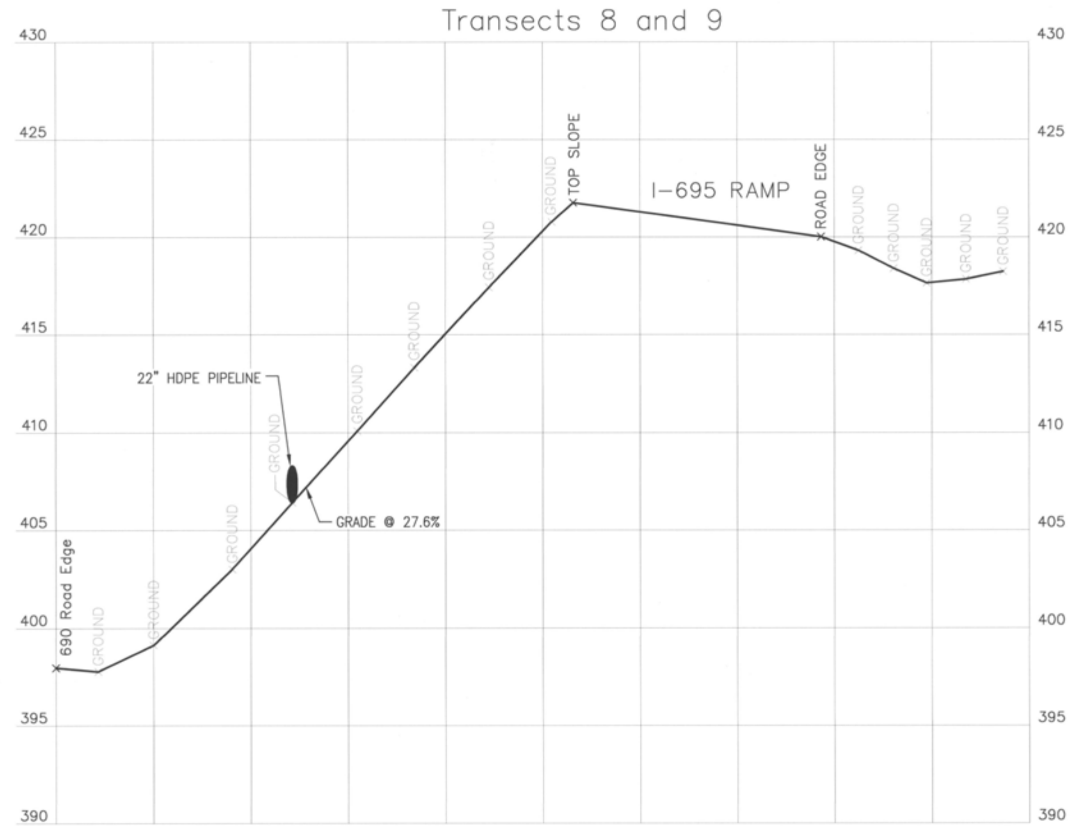
DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT SECTIONS AND PROFILES SHEET 2 OF 5

SCALE: SCALE AS NOTED (IF PRINTED ON 22x34 SHEET)

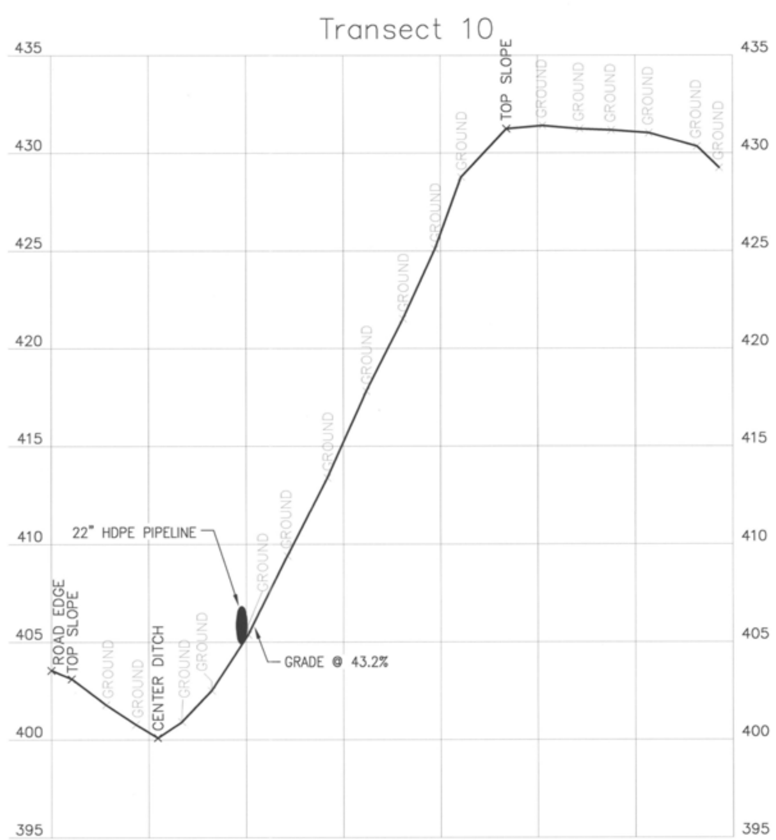
DRAWING NO.: 444853-200-C-126 REV. 0



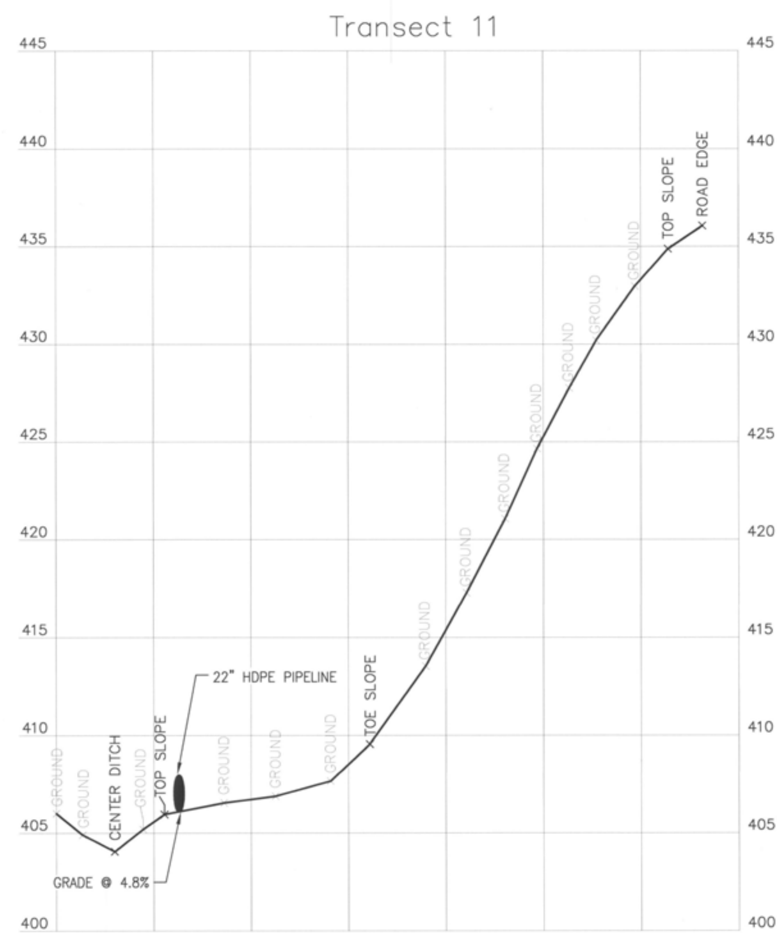
SECTION K C-107
SCALE: HORIZ. 1"=20' VERT. 1"=5'



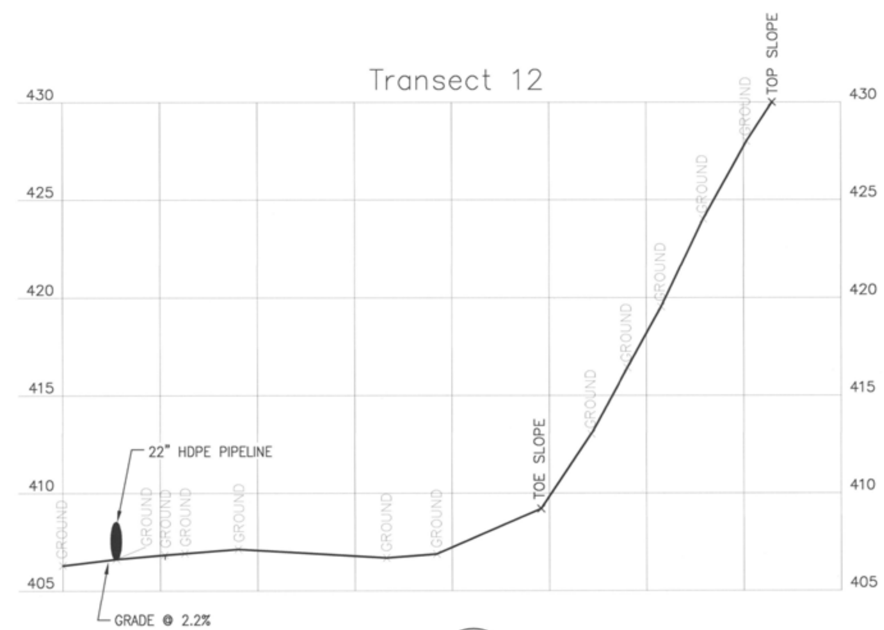
SECTION L C-107
SCALE: HORIZ. 1"=20' VERT. 1"=5'



SECTION M C-108
SCALE: HORIZ. 1"=20' VERT. 1"=5'



SECTION N C-108
SCALE: HORIZ. 1"=20' VERT. 1"=5'



SECTION P C-109
SCALE: HORIZ. 1"=20' VERT. 1"=5'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

5 2.5 0 5 10
SCALE: 1"=5'

20 10 0 20 40
SCALE: 1"=20'

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

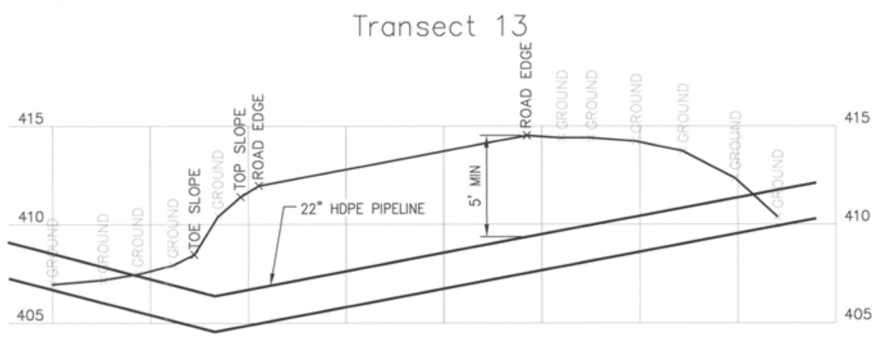
OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

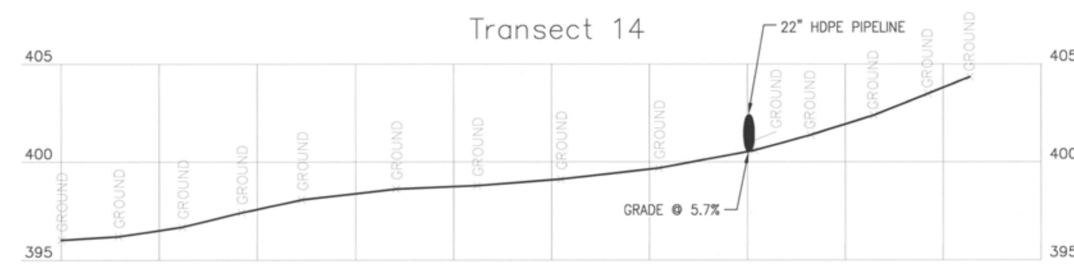
DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT
SECTIONS AND PROFILES
SHEET 3 OF 5

SCALE: AS NOTED (IF PRINTED ON 22x34 SHEET)

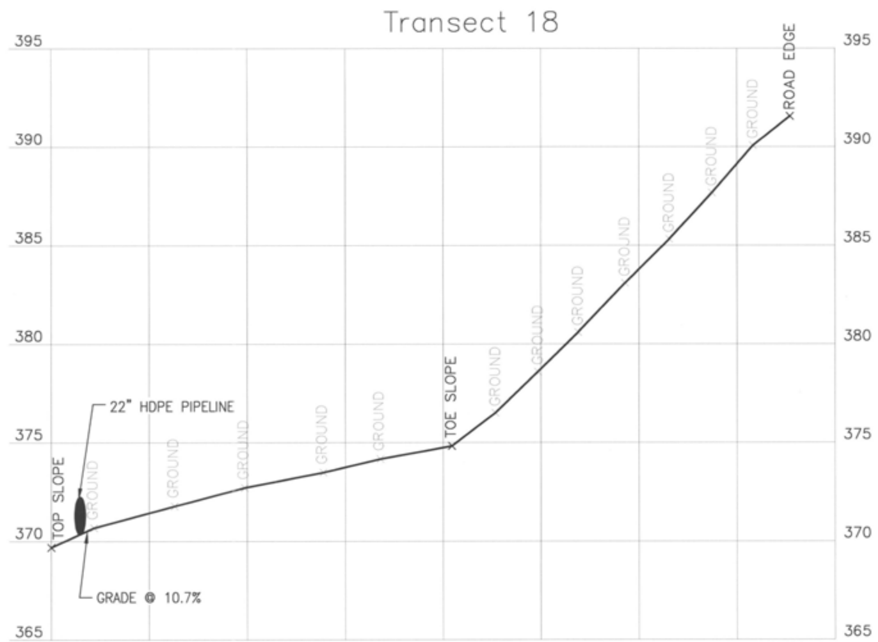
DRAWING NO. 444853-200-C-127 REV. 0



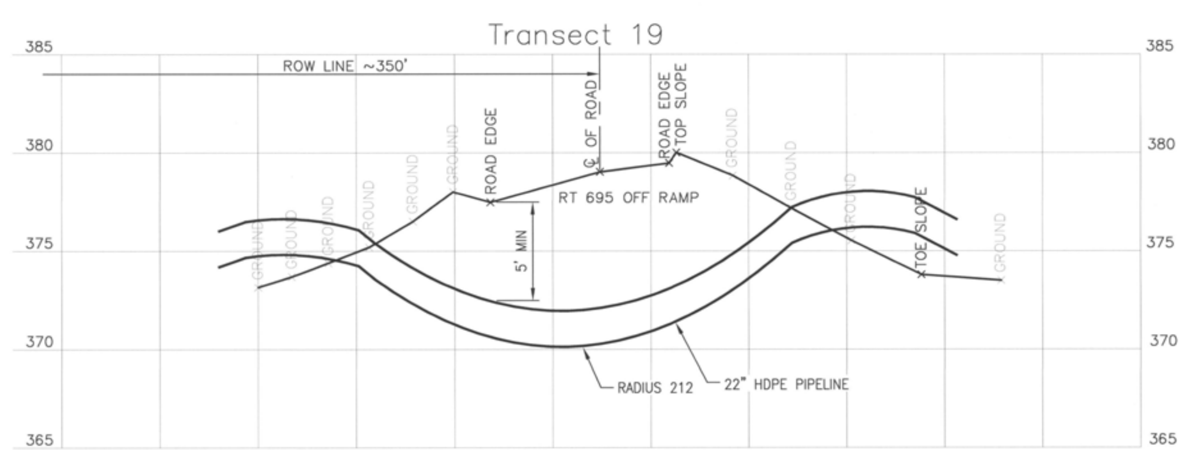
SECTION Q / C-109
SCALE: HORIZ. 1"=20'
VERT. 1"=5'



SECTION R / C-110
SCALE: HORIZ. 1"=20'
VERT. 1"=5'



SECTION S / C-111
SCALE: HORIZ. 1"=20'
VERT. 1"=5'



SECTION T / C-112
SCALE: HORIZ. 1"=20'
VERT. 1"=5'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

5 2.5 0 5 10
SCALE: 1"=5'

20 10 0 20 40
SCALE: 1"=20'

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY: JTS	DATE: 5/20/11	SEAL
CHECKED BY: TCD	DATE: 5/20/11	
APPROVED BY: DDS	DATE: 5/20/11	
PROJECT MGR.: PEB	DATE: 5/20/11	

STATE OF NEW YORK · LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

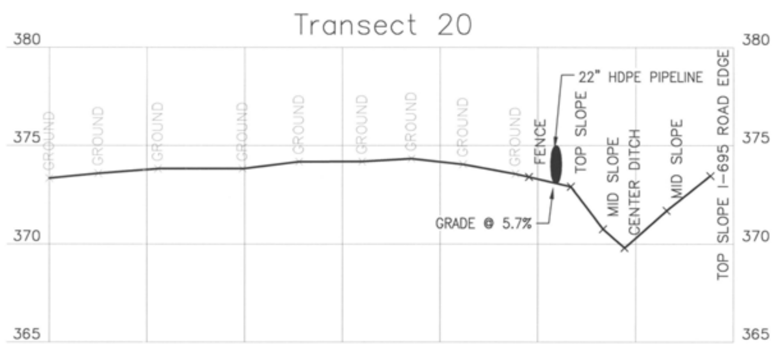
DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT
SECTIONS AND PROFILES
SHEET 4 OF 5

SCALE: SCALE AS NOTED (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-128
REV.: 0

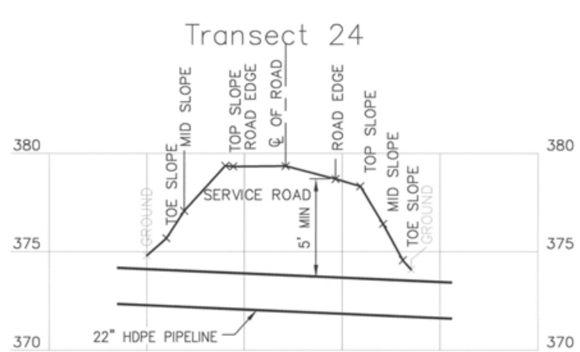
FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-125 TO 129.DWG
PLOT DATE: 5/19/2011 9:12 AM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



SECTION U C-112
SCALE: HORIZ. 1"=20' VERT. 1"=5'

SECTION V C-113
SCALE: HORIZ. 1"=20' VERT. 1"=5'



SECTION W C-116
SCALE: HORIZ. 1"=20' VERT. 1"=5'

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

5 2.5 0 5 10
SCALE: 1"=5'

20 10 0 20 40
SCALE: 1"=20'

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

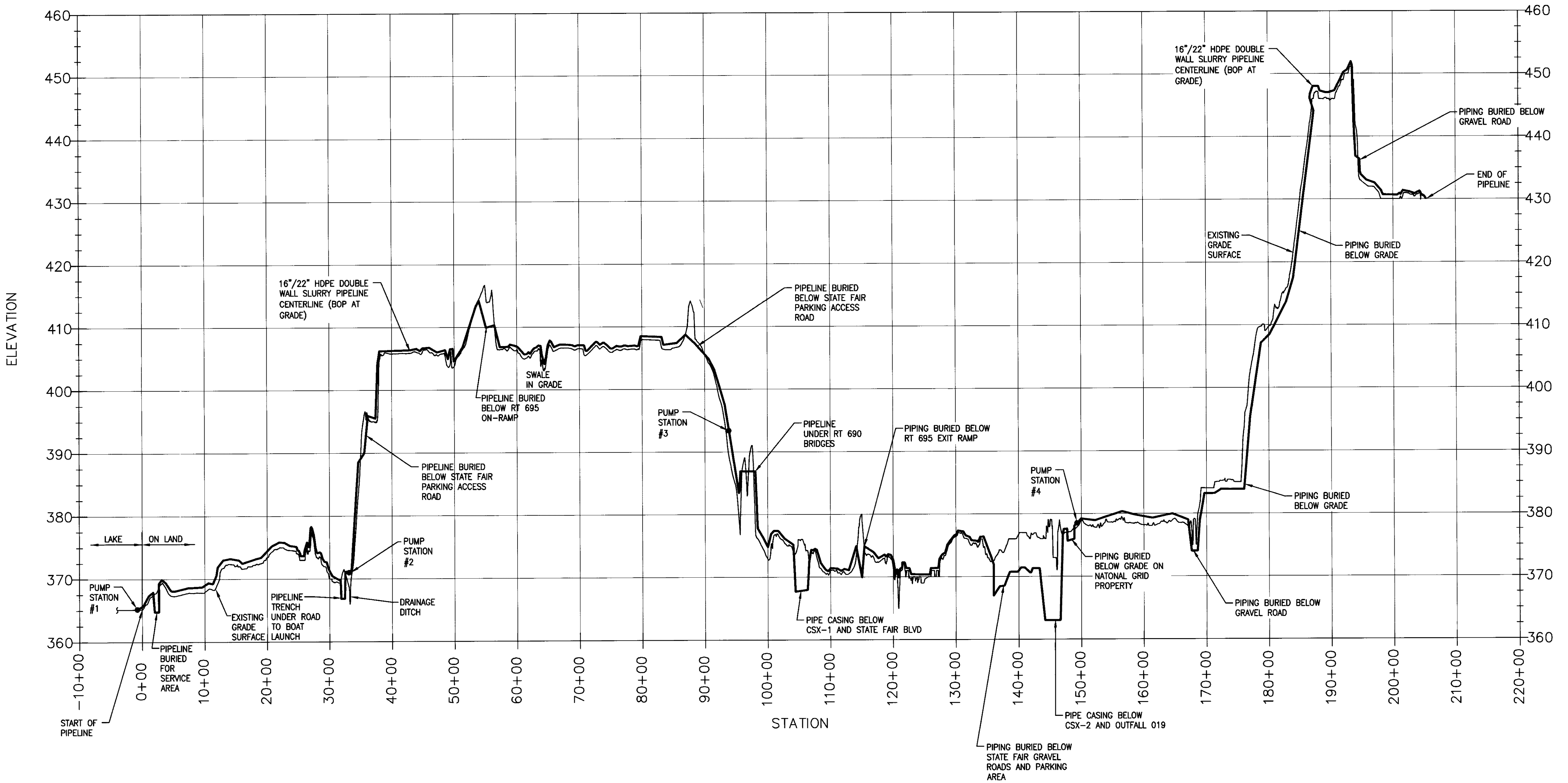
DRAWING TITLE:
SLURRY PIPELINE ALIGNMENT
SECTIONS AND PROFILES
SHEET 5 OF 5

SCALE: SCALE AS NOTED
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-129 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-125 TO 129.DWG
PLOT DATE: 5/19/2011 9:14 AM PLOTTED BY: SIVALIA, JACK

SLURRY PIPELINE PROFILE



10' 5' 0 10'
Approximate Scale in Feet
VERTICAL SCALE

1000' 500' 0 1000'
Approximate Scale in Feet
HORIZONTAL SCALE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL

STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE
ALIGNMENT PROFILE

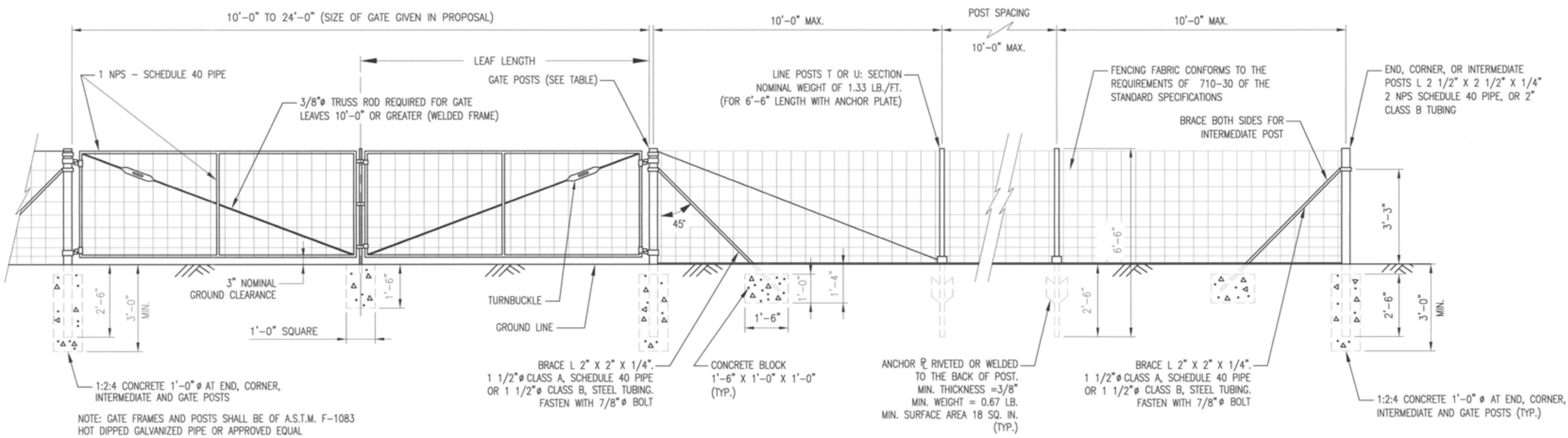
SCALE
AS NOTED

DRAWING NO.
444853-200-C-130

REV.
0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVL\444853-200-C-130.DWG
PLOT DATE: 5/23/2011 12:00 PM PLOTTED BY: SIVALIA, JACK

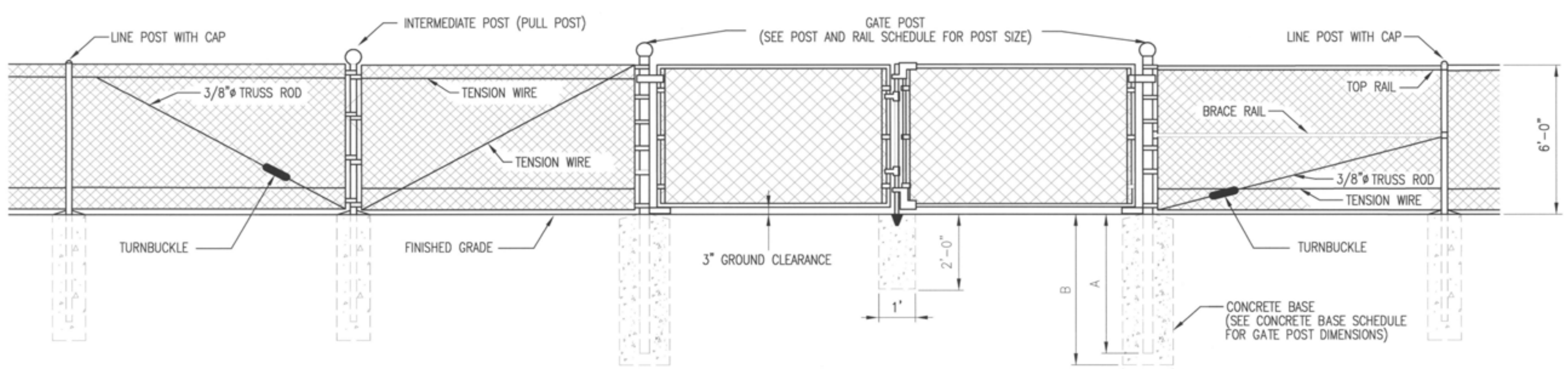
NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



DOUBLE LEAF GATE
(SHOWN WITH WELDED FRAME)
(SEE BELOW FOR CORNER FITTINGS)

R.O.W. FENCE (STEEL POSTS)
NYSDOT STANDARD SHEET 607-01

CORNER AND INTERMEDIATE DETAILS



CHAINLINK FENCE WITH TOP TENSION WIRE ADJACENT TO DOUBLE LEAF GATE

DOUBLE LEAF GATE
(SHOWN WITH WELDED FRAME)

CHAINLINK FENCE WITH TOP RAIL ADJACENT TO DOUBLE LEAF GATE
NYSDOT STANDARD SHEET 607-06

GATE POST CONCRETE BASE SCHEDULE

USE	DIA.	A	B
GATE POST FOR SINGLE LEAF GATES UP TO 12' SPAN	14"	3'-0"	3'-6"
GATE POST FOR DOUBLE LEAF GATES UP TO 24' SPAN	14"	3'-0"	3'-6"
GATE POST FOR DOUBLE LEAF GATES 28' - 36' SPAN	24"	3'-0"	3'-6"
GATES POSTS FOR DOUBLE LEAF GATES 40'- 44'	24"	3'-6"	3'-8"

(SEE NOTE 1)

*FROM ANSI - H35.2(M)

POST AND RAIL SCHEDULE

		STEEL				ALUMINUM		
USE	SECTION	NPS DESIGNATOR	ROLLFORMED	O.D. SIZE	WEIGHT LBS/FT	NPS DESIGNATOR	O.D. NOM.	WEIGHT LBS/FT
GATE POSTS FOR SINGLE LEAF GATES LESS THAN 6' SPAN	SCHEDULE 40 PIPE	2 1/2"		2 7/8"	5.79			
	CLASS B, STEEL	2 1/2"		2 7/8"	4.64	3 1/2"	4"	3.15
	ROLLFORMED		3 ½" X 3 ½"		5.10			
GATE POSTS FOR SINGLE LEAF GATES, 6' - 12' SPAN	SCHEDULE 40 PIPE	3 1/2"		4"	9.11	3 1/2"	4"	3.15
	ROLLFORMED		3 ½" X 3 ½"		5.10			
GATE POSTS FOR DOUBLE LEAF GATES, 10' - 24' SPAN	SCHEDULE 40 PIPE	3 1/2"		4"	9.11	3 1/2"	4"	3.15
	ROLLFORMED		3 ½" X 3 ½"		5.10			
GATES POSTS FOR DOUBLE LEAF GATES, 28' - 36' SPAN	SCHEDULE 40 PIPE	6		6 5/8"	18.97	6	6 5/8"	6.56
GATE POSTS FOR DOUBLE LEAF GATES, 40' - 44' SPAN	SCHEDULE 40 PIPE	8		8 5/8"	28.55	8	8 5/8"	9.88
GATE FRAME FOR GATES 8' IN WIDTH OR LESS	SCHEDULE 40 PIPE	1 1/2"		1 7/8"	2.72	1?	1 7/8"	0.94
GATE FRAME FOR GATES GREATER THAN 8' IN WIDTH	SCHEDULE 40 PIPE	2		2 3/8"	3.65	2	2 3/8"	1.264

NOTES:

1. GATES POSTS IN ROCK. WHERE SUBSTANTIAL ROCK IS ENCOUNTERED A HOLE 1" LARGER THAN THE GATE POST AND A MINIMUM DEPTH OF 1'-6" FOR SINGLE LEAF GATES UP TO 12' SPAN AND DOUBLE LEAF GATES UP TO 36' SPAN, AND 2' IN DEPTH FOR DOUBLE LEAF GATES 40' SPAN TO 44' SPAN SHALL BE MADE. AFTER INSERTING THE POSTS, THE HOLES SHALL BE BACKFILLED WITH A HAND MIXED 1:2 MORTAR CONSISTING OF ONE PART PORTLAND CEMENT AND TWO PARTS FINE AGGREGATE MIXED TO A PLASTIC CONSISTENCY SHOWING NO SIGN OF FREE WATER. THE HAND MIXING AND CONSOLIDATION OF THE MORTAR SHALL BE PERFORMED IN A MANNER APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL SUBMIT THE DETAILS FOR GATES AND CHAINLINK FENCE ADJACENT TO THEM TO THE ENGINEER. NO FENCE OR GATES SHALL BE ERECTED PRIOR TO THE APPROVAL OF THE VARIOUS DETAILS.
3. STEEL PIPES AND SHAPES SHALL WEIGH AT LEAST 95% OF THE WEIGHT SPECIFIED ON THIS SHEET. THEY MAY EXCEED THE SPECIFIED WEIGHT.
4. GATES WILL BE INSTALLED TO NYSDOT SPECIFICATION 607, MATERIAL WILL BE IN KIND WITH EXISTING FENCING (1962 NYSDOT SPEC, ITEM 106 MS-6).

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
CIVIL DOT DETAILS
GATE AND FENCE

SCALE: NO SCALE

DRAWING NO. 444853-200-C-131 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-131.DWG
PLOT DATE: 5/23/2011 1:18 PM PLOTTED BY: SNAJA, JACK

WORK ZONE TRAFFIC CONTROL

1. THE PERMITTEE SHALL BE AWARE THAT THE WORK ZONE TRAFFIC CONTROL IS A VERY CRITICAL ITEM OF THE PERMIT AND SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 "WORK ZONE TRAFFIC CONTROL" OF THE STANDARD SPECIFICATIONS, THE 2009 EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE NEW YORK STATE SUPPLEMENT. THE PERMITTEE SHALL BE RESPONSIBLE FOR WORK ZONE TRAFFIC CONTROL AT ALL TIMES FOR THE DURATION OF THE PERMITTED WORK.

2. ACTUAL FIELD CONDITIONS MAY REQUIRE OTHER SIGNS AND OTHER ARRANGEMENTS OF SIGNS. DISTANCES SHALL BE ADAPTED TO PREVAILING CONDITIONS. SIGNS SHALL BE LOCATED TO PROVIDE OPTIMUM VISIBILITY. SIGNS THAT ARE NOT APPLICABLE SHALL BE COVERED OR OBSCURED FROM SIGHT. ALL SIGN NUMBERS REFER TO THE 2009 EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE NEW YORK STATE SUPPLEMENT.

3. PEDESTRIAN ACCOMMODATIONS SHALL BE MAINTAINED FOR THE DURATION OF THE PROPOSED WORK. ANY DISTURBED AREAS WITHIN THE STATE RIGHT-OF-WAY SHALL BE ADEQUATELY FENCED TO PREVENT PEDESTRIAN ACCESS WHEN THE CONTRACTORS OPERATIONS ARE SHUT DOWN.

4. NO LANE OR SHOULDER CLOSURES SHALL BE PERMITTED BETWEEN THE HOURS OF 3:00 PM UNTIL 6:00 PM AND DURING THE SYRACUSE NATIONALS AND NEW YORK STATE FAIR.

5. MATERIALS, EQUIPMENT AND VEHICLES SHALL NOT BE STORED OR PARKED WITHIN THE STATE RIGHT-OF-WAY BEFORE WORK BEGINS OR AFTER CONTRACTOR'S OPERATIONS ARE SHUT DOWN. STAGING AREAS OUTSIDE THE RIGHT-OF-WAY SHALL BE USED TO STOCKPILE ALL CONSTRUCTION MATERIALS.

   DURING WORKING HOURS, NO CONSTRUCTION MATERIAL MAY BE STORED OR PLACED ON THE ROADWAY OR ROADBED EXCEPT WITHIN A PROTECTED WORK AREA.

6. VEHICLES BELONGING TO THE PERMITTEE OR WORKERS SHALL NOT BE PARKED WITHIN 30 FEET OF THE EDGE OF PAVEMENT ALONG A ROADWAY BEING USED BY THE GENERAL PUBLIC, UNLESS THEY ARE PARKED WITHIN A PROTECTED WORK AREA.

   DURING NON-WORKING HOURS, CONSTRUCTION EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN 30 FEET OF THE EDGE OF PAVEMENT.

7. W20-7A "FLAGGER" SIGNS SHALL BE USED WHENEVER FLAGGING OCCURS FOR MORE THAT A BRIEF PERIOD OF TIME. THE SIGNS SHALL BE PROMPTLY REMOVED, COVERED, OR FACED AWAY FROM TRAFFIC WHEN THE FLAGGING OPERATION CEASES.

   ALL FLAGGING STATIONS AND LANE CLOSURES SHOULD BE LOCATED TO ENSURE MAXIMUM VISIBILITY.

8. CARE SHALL BE TAKEN TO INSURE THAT NO DAMAGE OCCURS TO THE EXISTING PAVEMENT/SHOULDER/CURB AREAS AS A RESULT OF CONSTRUCTION EQUIPMENT MOVEMENT.

9. THE PERMITTEE MAY SUBMIT REVISIONS TO THIS PLAN FOR APPROVAL, BUT ANY CHANGE THAT ALTERS THE BASIC CONCEPTS OF THE PLAN MUST BE APPROVED BY THE REGIONAL DIRECTOR OR HIS DESIGNEE.

MAINTENANCE AND RESTORATION

1. DURING THE OCCUPANCY OF THE PIPELINE MOWING WILL BE PERFORMED BY HONEYWELL'S CONTRACTOR FOR THE AREA IN THE NYSDOT ROW. MOWING WILL BE PERFORMED AT LEAST TWICE A YEAR.

2. ALL OTHER TYPICAL MAINTENANCE OF THE NYSDOT ROW (i.e. SPRAYING OF HERBICIDES, LITTER PICKUP) CAN BE PERFORMED BY THE NYSDOT IN THE AREA OCCUPIED BY THE PIPELINE.

3. ONCE THE PIPELINE IS REMOVED AFTER OPERATIONS ARE COMPLETED THE AREA WILL BE RESTORED TO EXISTING OR BETTER THAN EXISTING CONDITIONS FOLLOWING NYSDOT STANDARD SPECIFICATION 107-08C.

REFERENCE DRAWINGS

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 03 WORK ZONE TRAFFIC CONTROL TYPICAL'S (DRAWINGS):

1. R3-11-8/6/09 LEGEND AND TABLES
2. R3-22-8/10/09 SHOULDER CLOSURE EXPRESSWAY / FREEWAY
3. R3-24-8/7/09 PARTIAL EXIT RAMP CLOSURE EXPRESSWAY / FREEWAY
4. R3-31-5/26/10 SINGLE LANE CLOSURE MULTI LANE DIVIDED HIGHWAY

U.S. CUSTOMARY STANDARD SHEETS

1. 606-04 SHEET 1 OF 4, BOX BEAM GUIDE RAIL
2. 606-04 SHEET 2 OF 4, BOX BEAM GUIDE RAIL
3. 606-04 SHEET 3 OF 4, BOX BEAM GUIDE RAIL
4. 606-06 BOX BEAM END ASSEMBLY TYPE III, GRADING, PAYMENT AND LAYOUT DETAILS

NOTES:

1. FOLLOW REGIONAL WORK ZONE TRAFFIC CONTOL (WZTC) NOTES 1 THROUGH 9 AND REFERENCED NYSDOT WZTC DRAWINGS FOR IMPLEMENTATION OF NYSDOT REQUIREMENTS AND STANDARD DETAILS.
2. SEE REFERENCED BOX BEAM GUIDE RAIL DRAWINGS FOR NYSDOT TYPICAL DETAILS AND REQUIREMENTS FOR THE INSTALLATION OF GUIDE RAILS, SPLICE JOINTS AND END ASSEMBLIES.
3. BOX BEAM GUIDE RAIL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION FOR GUIDE RAILS SECTION 606.
4. EXISTING SECTION TO BE REMOVED AND NEW SECTION TO BE SPLICED ON.
5. AFTER PIPELINE IS REMOVED THE GUIDE RAIL EXTENSION WILL BE REMOVED AND THE ORIGINAL END SECTION WILL BE REPLACED.
6. AFTER GUIDE RAIL AND PIPELINE HAVE BEEN REMOVED, DISTURBED AREA SHALL BE RESTORED TO NYSDOT STANDARD SPECIFICATION 107-08C.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY JTS	DATE 5/20/11	SEAL
CHECKED BY TCD	DATE 5/20/11	
APPROVED BY DDS	DATE 5/20/11	
PROJECT MGR. PEB	DATE 5/20/11	

STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

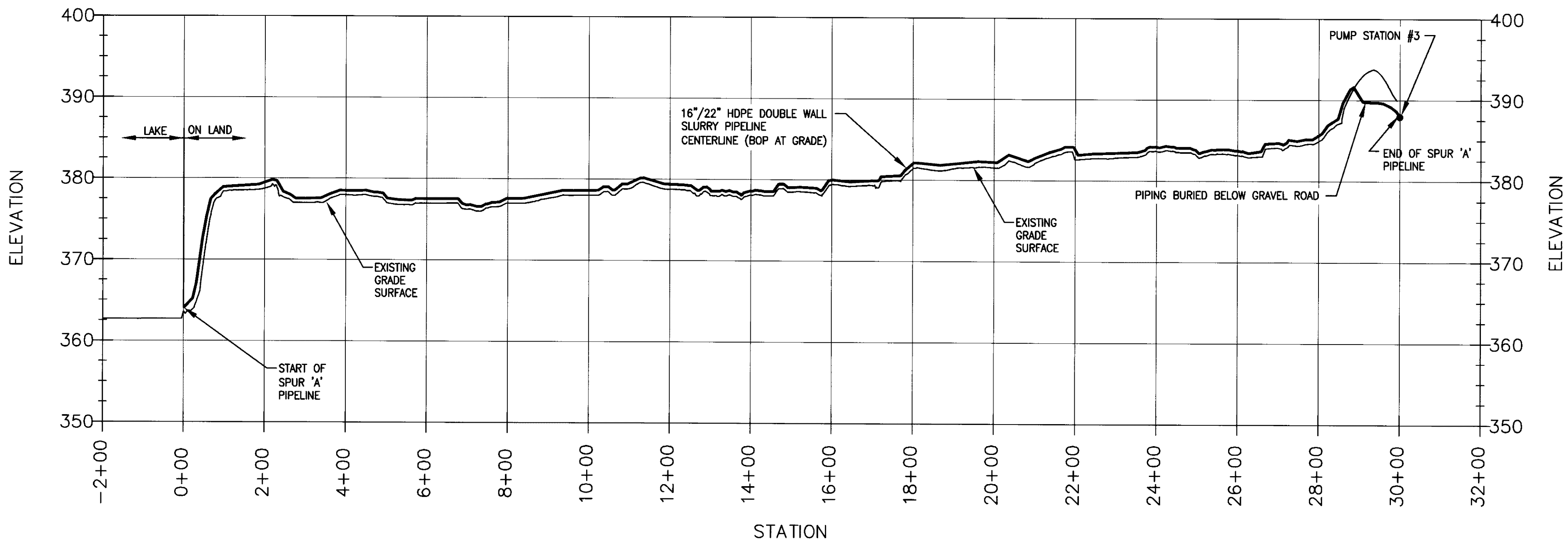
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
NYSDOT TRAFFIC PLANNING
NOTES AND REFERENCES

SCALE
NO SCALE

DRAWING NO. 444853-200-C-132 REV. 0

SLURRY PIPELINE REMEDIATION AREA 'A' SPUR



10 5 0 10 20
SCALE: 1"=10'
VERTICAL SCALE

200 100 0 200 400
SCALE: 1"=200'
HORIZONTAL SCALE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

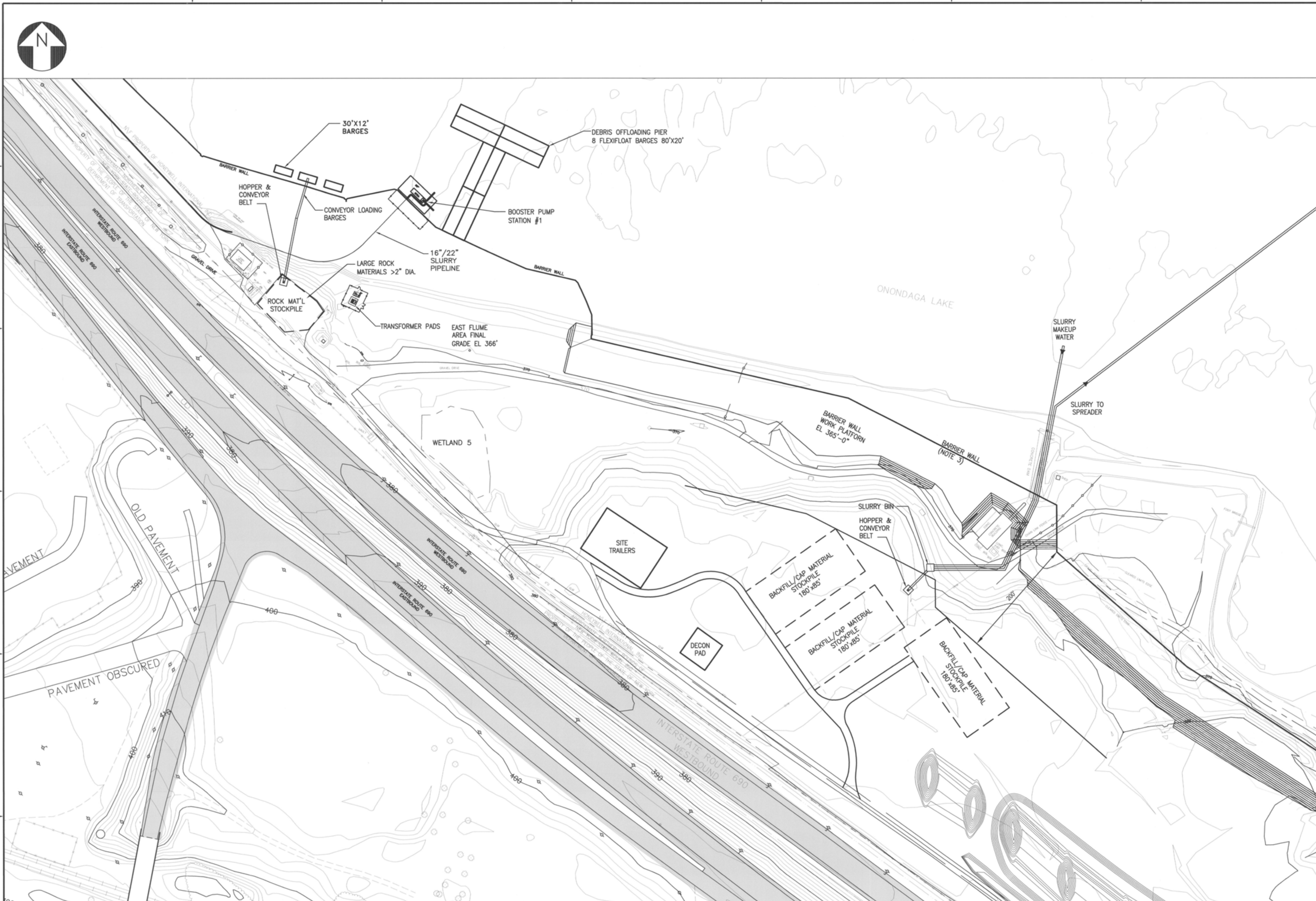
DRAWING TITLE:
SLURRY PIPELINE PROFILE REMEDIATION AREA 'A' SPUR

SCALE: AS NOTED

DRAWING NO. 444853-200-C-133 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVL\444853-200-C-133.DWG
PLOT DATE: 7/28/2011 7:55 PM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. EXISTING AND PROPOSED GRADE CONTOURS NEAR THE BARRIER WALL ARE SHOWN. SITE MODIFICATIONS AND RESTORATION OF THIS AREA IS IN PROGRESS AND WILL BE DETAILED IN THE FINAL DESIGN.

LEGEND:

PROPERTY LINE

WETLAND BOUNDARY

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APP'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

DRAWN BY: JTS	DATE: 7/29/11	SEAL
CHECKED BY: XH	DATE: 7/29/11	
APPROVED BY: DDS	DATE: 7/29/11	
PROJECT MGR.: PEB	DATE: 7/29/11	

STATE OF NEW YORK · LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

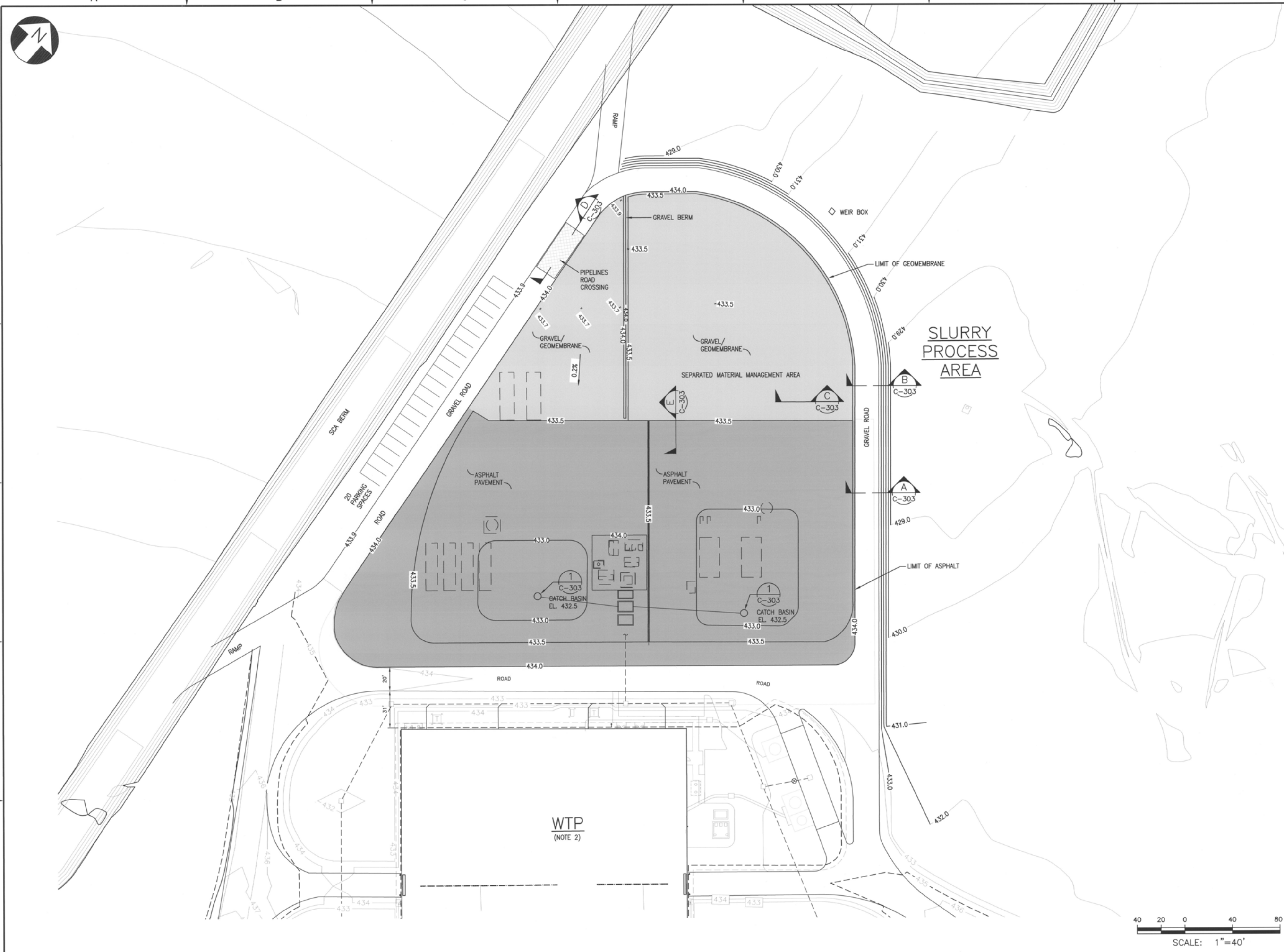
DRAWING TITLE:
SHORELINE SUPPORT AREA 1 PLAN

SCALE: SCALE 1"= 80' (IF PRINTED ON 22x34 SHEET)

80 40 0 80 160
SCALE: 1"=80'

DRAWING NO.: 444853-200-C-201
REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-201.DWG
PLOT DATE: 7/28/2011 8:19 PM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. SEE SCA WATER TREATMENT PLANT (WTP) DESIGN DRAWINGS FOR WTP PLANS AND DETAILS. WTP FEATURES SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED ON UTILITY PLAN DRAWING U-1, FILE 1163.45613-U1.

LEGEND:

LIMIT OF GEOMEMBRANE

LIMIT OF ASHALT

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JHG	XH	DDS

DRAWN BY JHG	DATE 7/29/11	SEAL
CHECKED BY XH	DATE 7/29/11	
APPROVED BY DDS	DATE 7/29/11	
PROJECT MGR. PEB	DATE 7/29/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

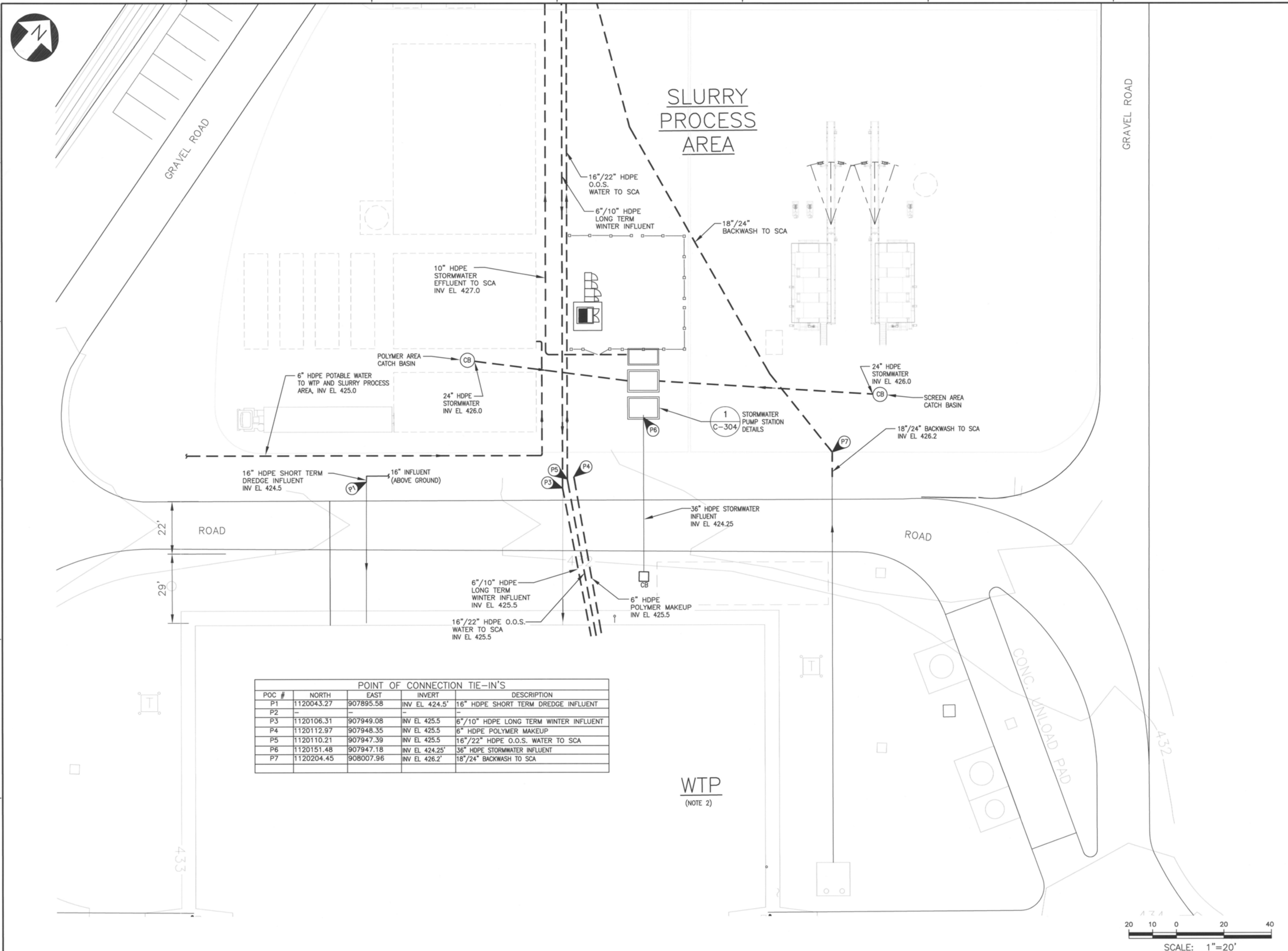
JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PROCESS AREA
CIVIL GRADING PLAN

SCALE: SCALE 1"=40' (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-301 REV. 0



POINT OF CONNECTION TIE-IN'S				
POC #	NORTH	EAST	INVERT	DESCRIPTION
P1	1120043.27	907895.58	INV EL 424.5'	16" HDPE SHORT TERM DREDGE INFLUENT
P2	–	–	–	–
P3	1120106.31	907949.08	INV EL 425.5	6"/10" HDPE LONG TERM WINTER INFLUENT
P4	1120112.97	907948.35	INV EL 425.5	6" HDPE POLYMER MAKEUP
P5	1120110.21	907947.39	INV EL 425.5	16"/22" HDPE O.O.S. WATER TO SCA
P6	1120151.48	907947.18	INV EL 424.25'	36" HDPE STORMWATER INFLUENT
P7	1120204.45	908007.96	INV EL 426.2'	18"/24" BACKWASH TO SCA

NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-001.
2. SEE SCA WATER TREATMENT PLANT (WTP) DESIGN DRAWINGS FOR WTP PLANS AND DETAILS. WTP FEATURES SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED ON UTILITY PLAN DRAWING U-1, FILE 1163.45613-U1.
3. THE BURIAL DEPTH AND ELEVATION OF BURIED PIPE WILL BE DETERMINED AFTER COMPLETION OF PRELOADING IN THE SLURRY PROCESSING AREA.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

	DATE
DRAWN BY JHG	7/29/11
CHECKED BY XH	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

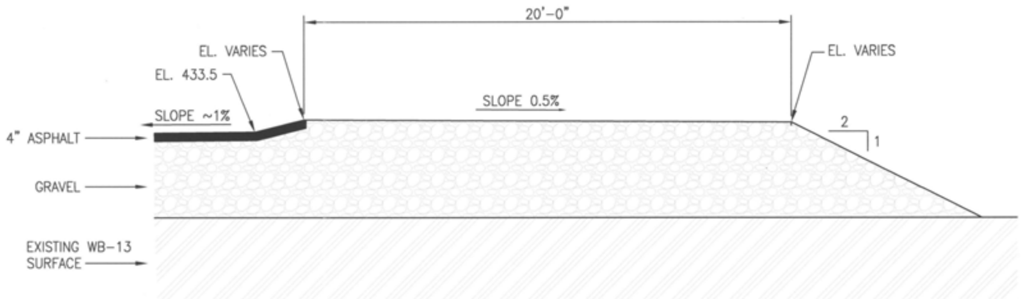
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PROCESS AREA CIVIL UTILITIES AND STORM DRAIN PLAN

SCALE
SCALE 1"=20'
(IF PRINTED ON 22x34 SHEET)

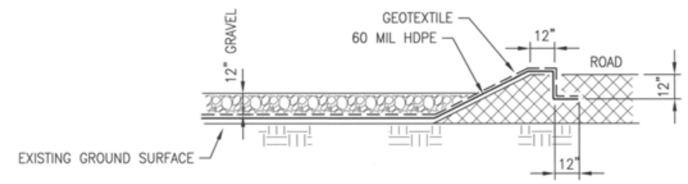
DRAWING NO. 444853-200-C-302
REV. 0

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



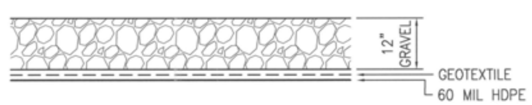
TYPICAL ROAD CROSS-SECTION

SECTION A C-301
SCALE: 1/4" = 1'-0"



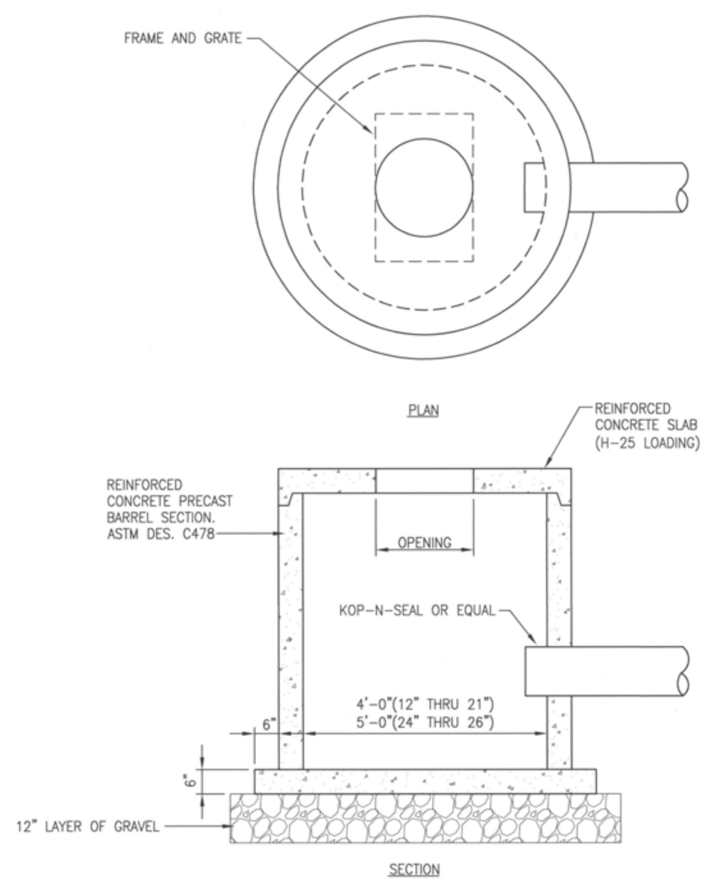
SEPARATED MATERIAL MANAGEMENT AREA TYPICAL ROAD EDGE

SECTION B C-301
SCALE: NTS



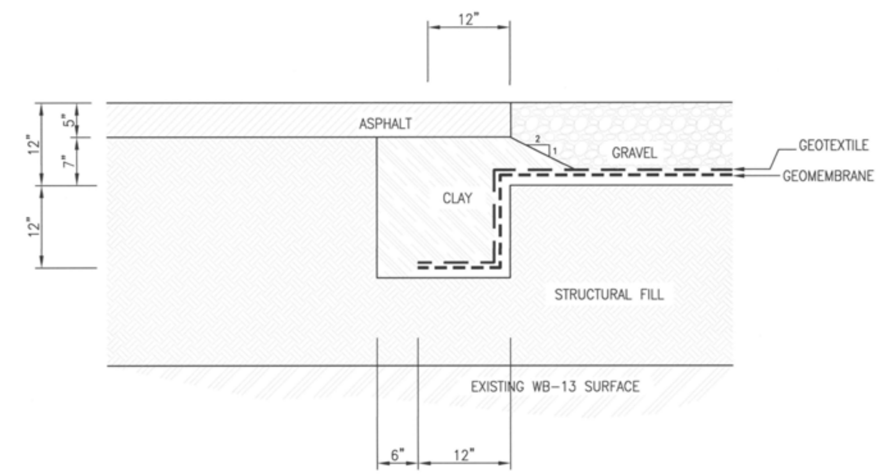
SEPARATED MATERIAL MANAGEMENT AREA TYPICAL LINER

SECTION C C-301
SCALE: NTS

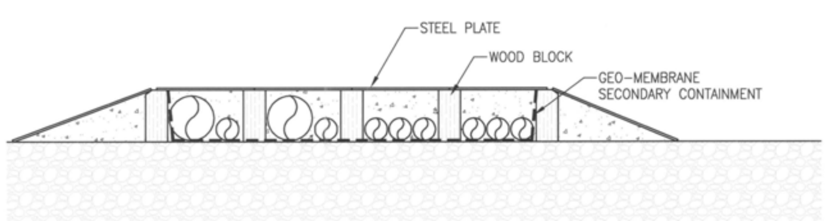


TYPICAL CATCH BASIN DETAIL

DETAIL 1 C-301
SCALE: 1/2" = 1'-0"



SECTION E C-301
SCALE: NTS



ROAD PIPE CROSSING RAMP (CONCEPT ONLY)

SECTION D C-301
SCALE: 1/4" = 1'-0"

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

DRAWN BY JTS	DATE 7/29/11	SEAL
CHECKED BY XH	DATE 7/29/11	
APPROVED BY DDS	DATE 7/29/11	
PROJECT MGR. PEB	DATE 7/29/11	

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

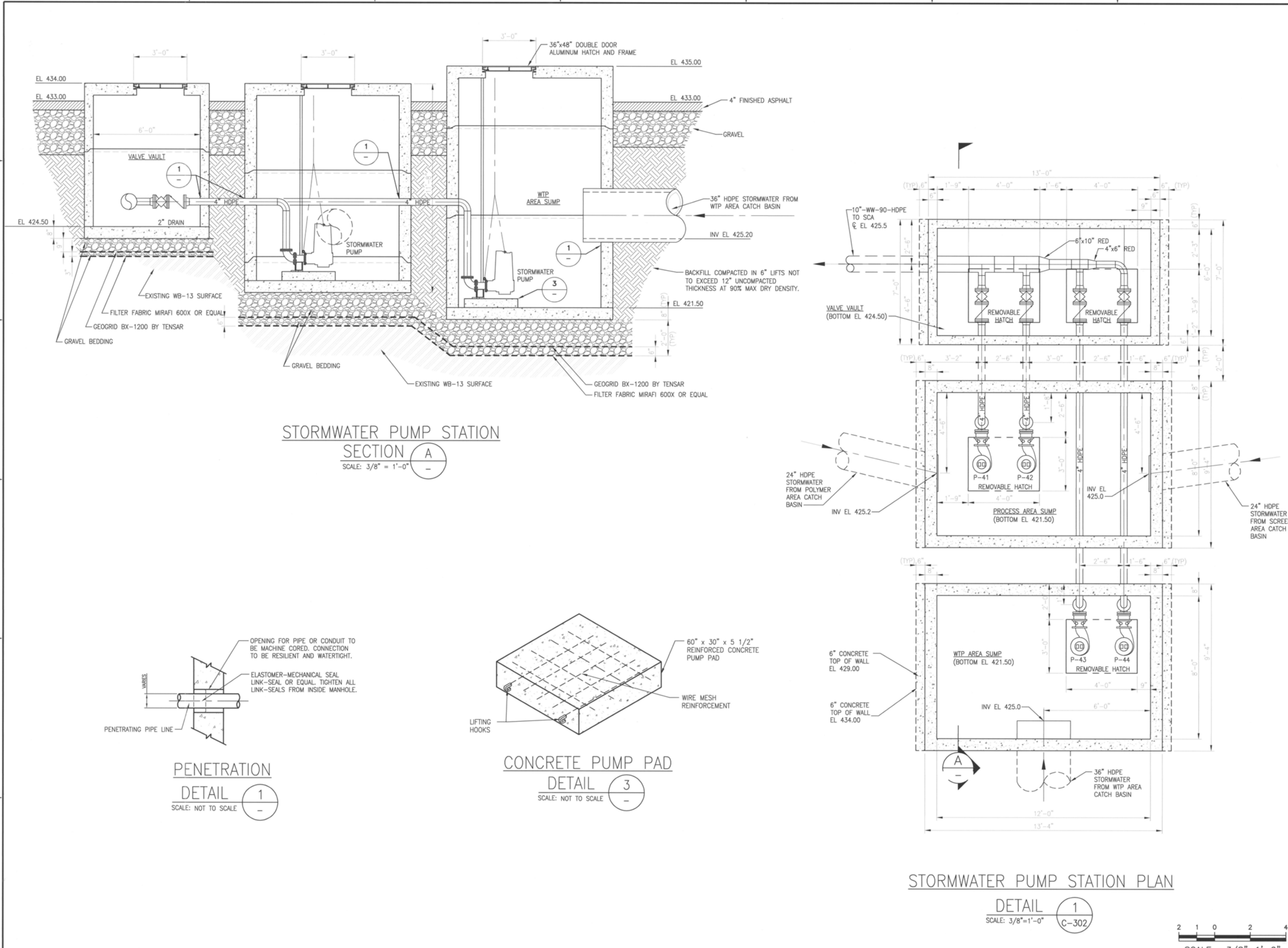
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PROCESS AREA
CIVIL SECTIONS AND DETAILS

SCALE
SCALE 1/4" =1'-0"
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-303
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-303.DWG
PLOT DATE: 8/23/2011 6:22 PM PLOTTED BY: SIVALIA, JACK



NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APP'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JHG	XH	DDS

DRAWN BY: JHG	DATE: 7/29/11	SEAL
CHECKED BY: XH	DATE: 7/29/11	
APPROVED BY: DDS	DATE: 7/29/11	
PROJECT MGR.: PEB	DATE: 7/29/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

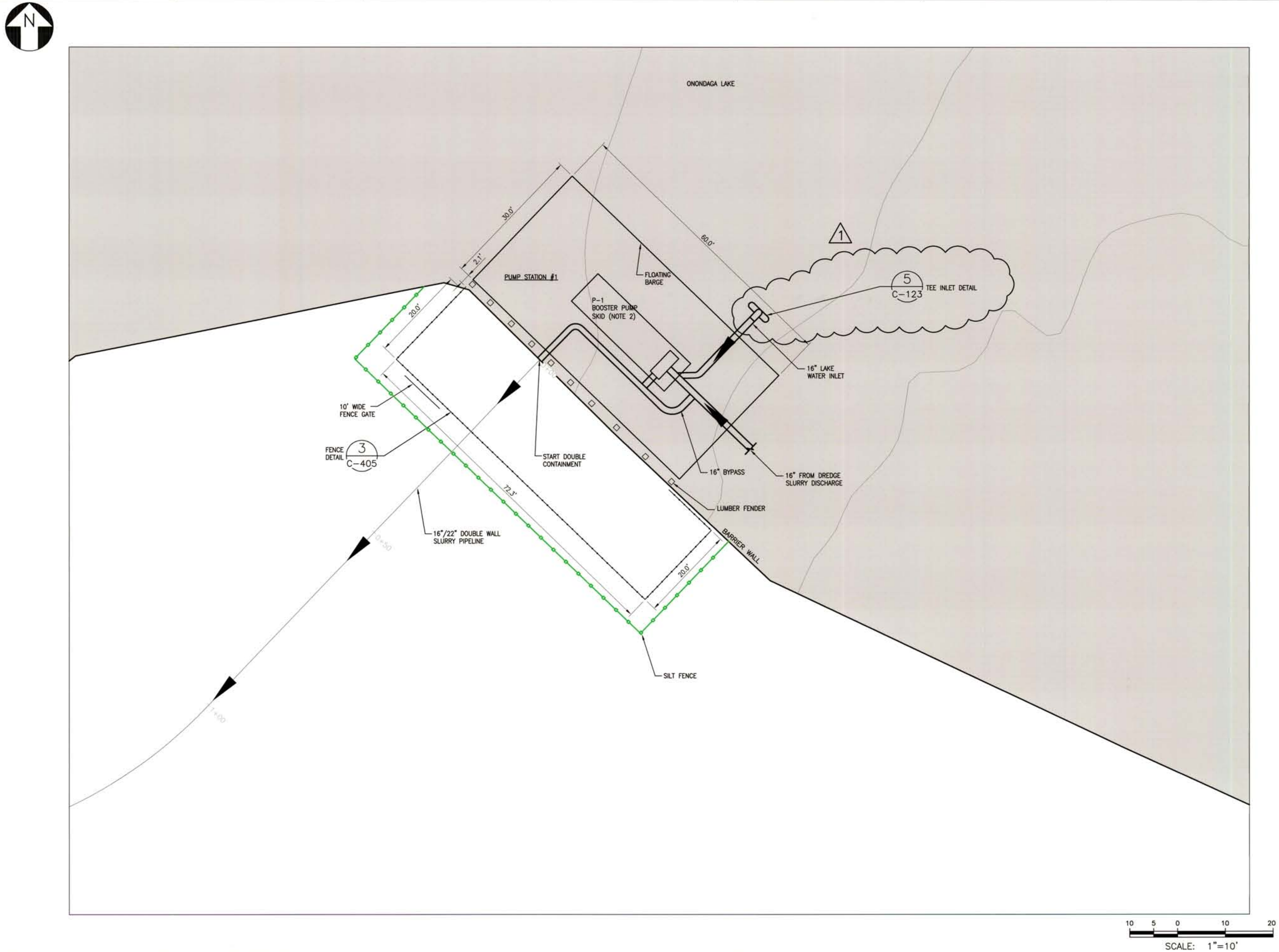
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PROCESS AREA
CIVIL STORMWATER
PUMP STATION DETAILS

SCALE: SCALE 3/8" =1'-0" (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-304 REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-304.DWG
PLOT DATE: 7/28/2011 9:20 PM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. BOOSTER PUMP SKID IS LOCATED ON A FLOATING BARGE ADJACENT TO BARRIER WALL; SEE P&ID'S FOR BOOSTER PUMP COMPONENTS.
3. PIPING LAYOUT PENDING VENDOR DESIGN.
4. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	ADDED INLET TEE	7/29/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL
9/20/11

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

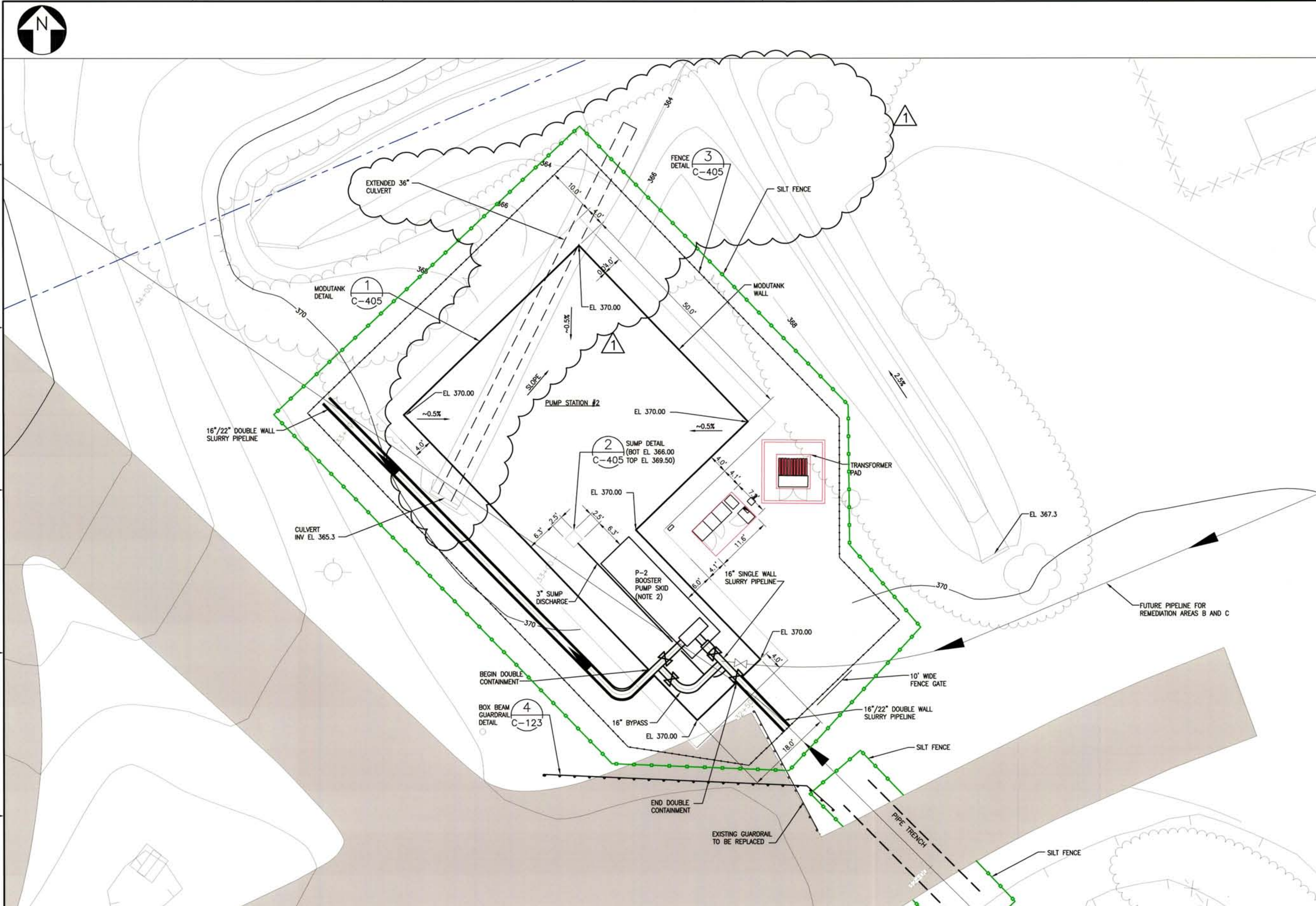
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PIPELINE
BOOSTER PUMP 1
PUMP STATION PLAN

SCALE
SCALE 1"= 10'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-C-401
REV. 1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-401 TO 404.DWG
PLOT DATE: 7/28/2011 9:41 AM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. BOOSTER PUMP SKID, SEE P&ID'S FOR COMPONENTS.
3. PIPING LAYOUT PENDING VENDOR DESIGN.
4. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

PROPERTY LINE
SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
1	REVISED CULVERT LOCATION	7/29/11	JTS	TCD	DDS
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY TCD	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

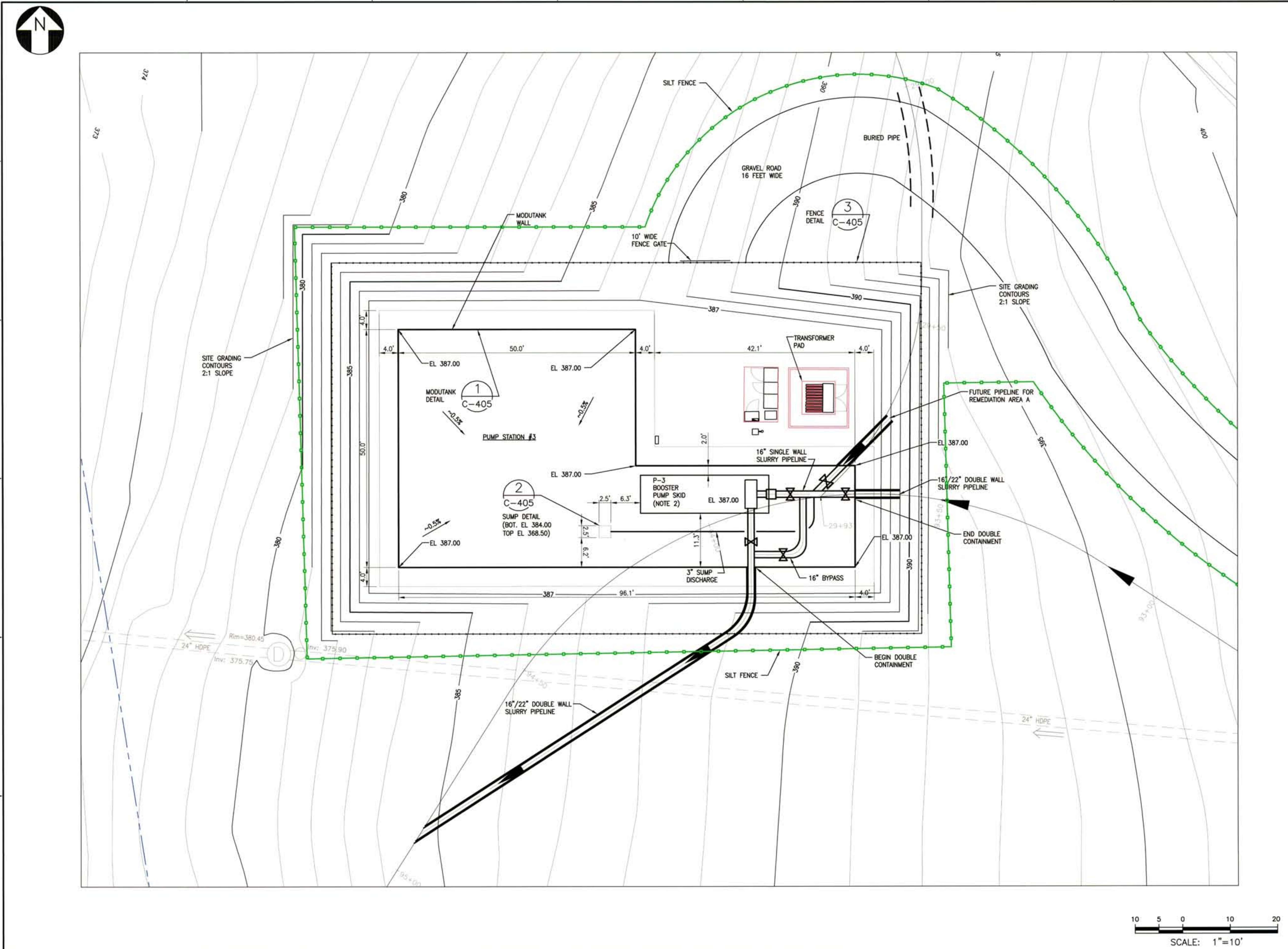
DRAWING TITLE
SLURRY PIPELINE
BOOSTER PUMP 2
PUMP STATION PLAN

SCALE: SCALE 1"= 10' (IF PRINTED ON 22x34 SHEET)

10 5 0 10 20
SCALE: 1"=10'

DRAWING NO. 444853-200-C-402 REV. 1

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-401 TO 404.DWG
PLOT DATE: 7/28/2011 9:38 AM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. BOOSTER PUMP SKID, SEE P&ID'S FOR COMPONENTS.
3. PIPING LAYOUT PENDING VENDOR DESIGN.
4. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

PROPERTY LINE
SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

DRAWN BY: JTS	DATE: 5/20/11	SEAL
CHECKED BY: TCD	DATE: 5/20/11	
APPROVED BY: DDS	DATE: 5/20/11	
PROJECT MGR.: PEB	DATE: 5/20/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

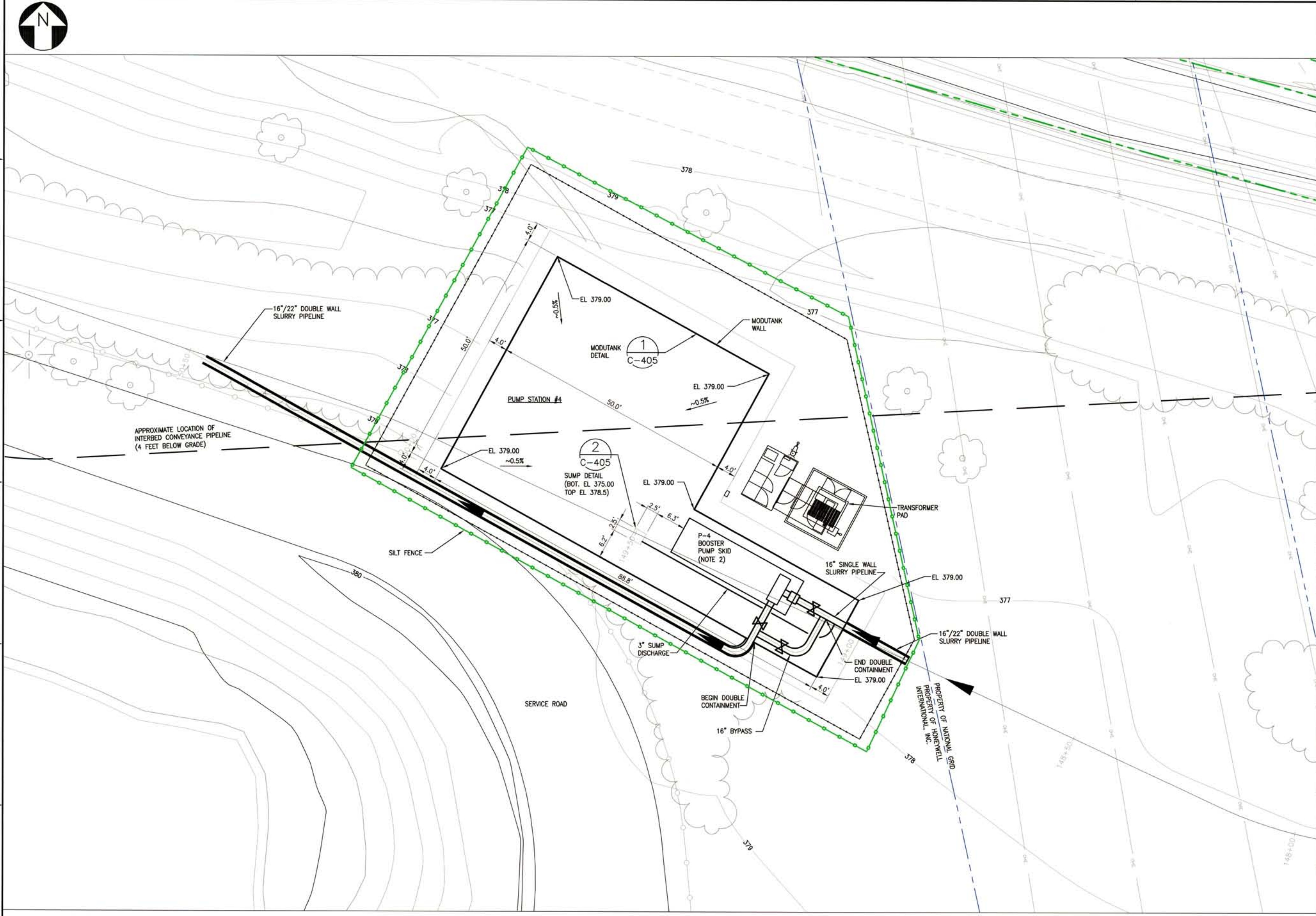
OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE
BOOSTER PUMP 3
PUMP STATION PLAN

SCALE: SCALE 1"= 10' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-403
REV.: 0



NOTES:

1. SEE GENERAL NOTES ON DRAWING 444853-200-C-101.
2. BOOSTER PUMP SKID, SEE P&ID'S FOR COMPONENTS.
3. PIPING LAYOUT PENDING VENDOR DESIGN.
4. SEE DRAWING 444853-200-C-406 FOR EROSION AND SEDIMENT CONTROL DETAILS.

LEGEND:

- PROPERTY LINE
- SILT FENCE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL: STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB: 444853
WBS: 04620

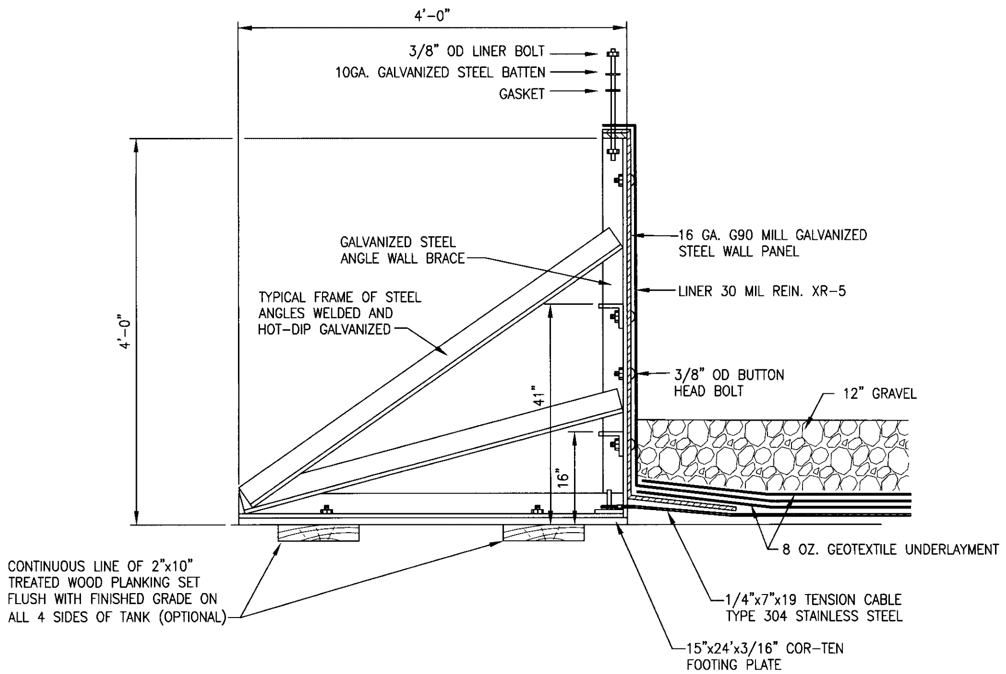
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PIPELINE
BOOSTER PUMP 4
PUMP STATION PLAN

SCALE: SCALE 1"= 10' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-C-404 REV.: 0

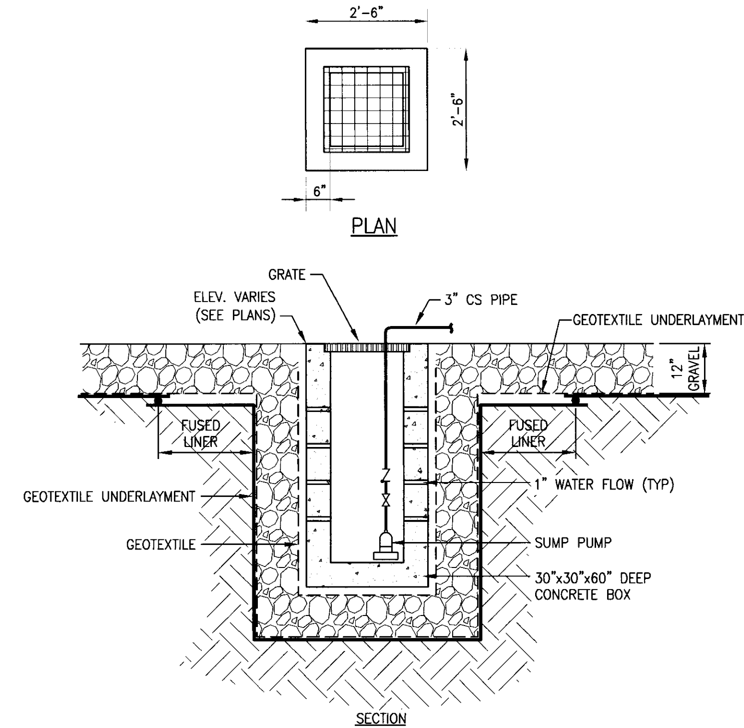
FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CADD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-401 TO 404.DWG
PLOT DATE: 5/19/2011 4:44 PM PLOTTED BY: SNAJA, JACK



NOTE:
CONTAINMENT DESIGN IS CONCEPTUAL, EQUIVALENT ALTERNATIVES WILL BE ACCEPTABLE.

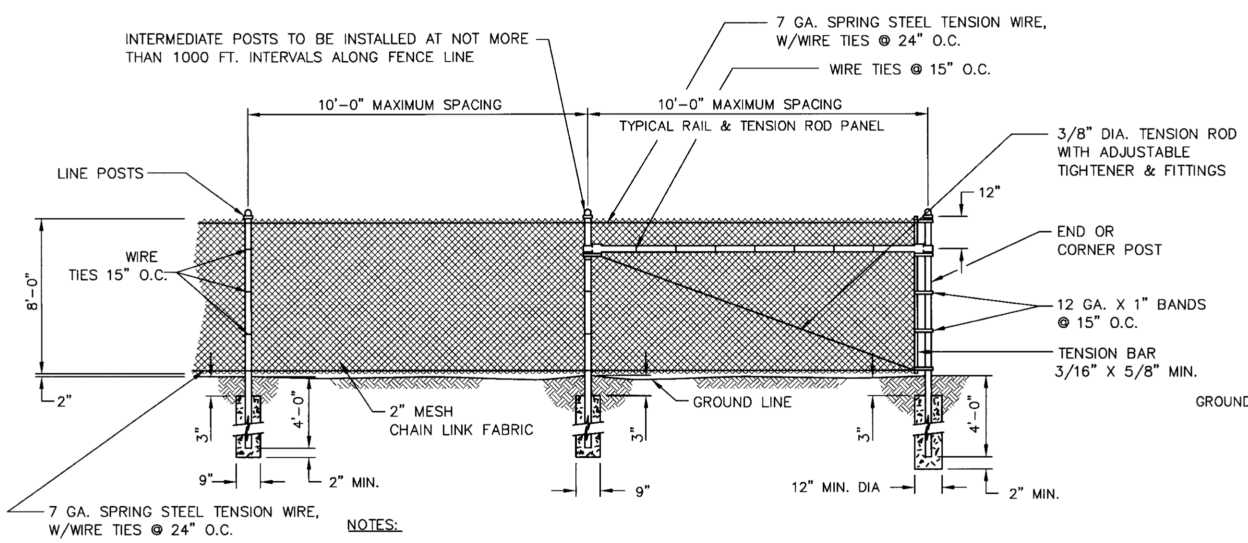
MODUTANK WALL TYPICAL FRAME

DETAIL 1 C-402 C-403 C-404
SCALE: NTS



TYPICAL BOOSTER PUMP STATION SUMP

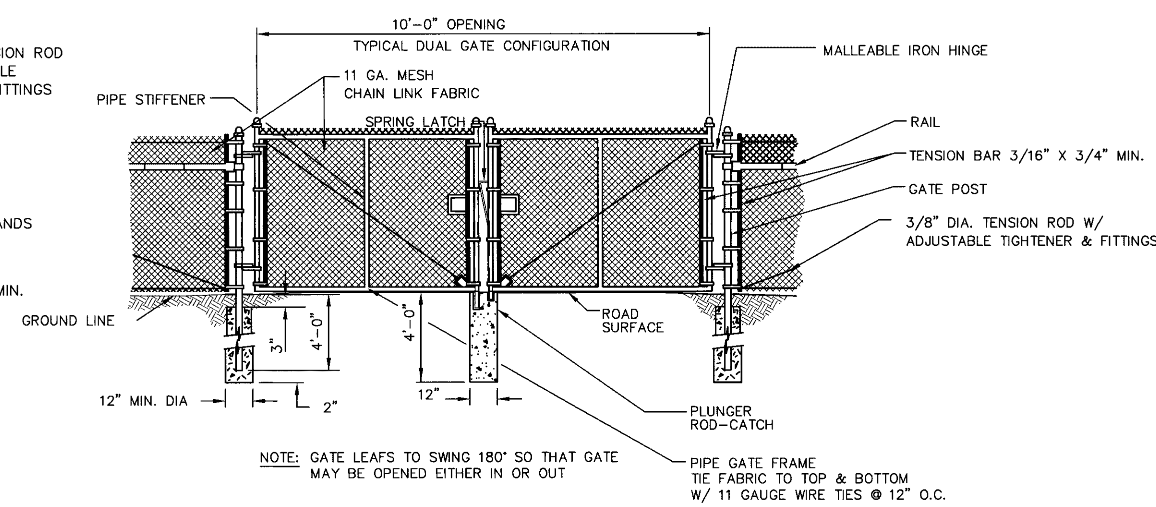
DETAIL 2 C-402 C-403 C-404
SCALE: 1/2" = 1'-0"



NOTES:

1. FOR CORNERS, TYPICAL RAIL AND TENSION ROD PANEL TO JOIN POST IN BOTH DIRECTIONS. CHANGES IN LINE WHEN ANGLE OR DEFLECTION IS 20° OR MORE SHALL BE CONSIDERED A CORNER.
2. INTERMEDIATE POSTS TO BE REINFORCED WITH TENSION RODS AND RAILS BOTH SIDES SIMILAR TO END OR CORNER POSTS.
3. LINE POSTS IN ROCK SHALL BE SOCKETED A MINIMUM OF 2 FT. AND BE 12" IN DIAMETER.

TYPICAL FENCE DETAIL



NOTE: GATE LEAFS TO SWING 180° SO THAT GATE MAY BE OPENED EITHER IN OR OUT

DOUBLE GATE

DETAIL 3 C-402 C-401 C-403 C-404
SCALE: NTS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APP'D
0	ISSUED FOR CONSTRUCTION	5/20/11	JTS	TCD	DDS

	DATE
DRAWN BY JTS	5/20/11
CHECKED BY TCD	5/20/11
APPROVED BY DDS	5/20/11
PROJECT MGR. PEB	5/20/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

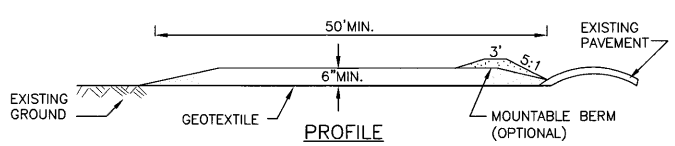
DRAWING TITLE
SLURRY PIPELINE
BOOSTER PUMP STATION
DETAILS

SCALE
SCALE: AS NOTED
(IF PRINTED ON 22x34 SHEET)

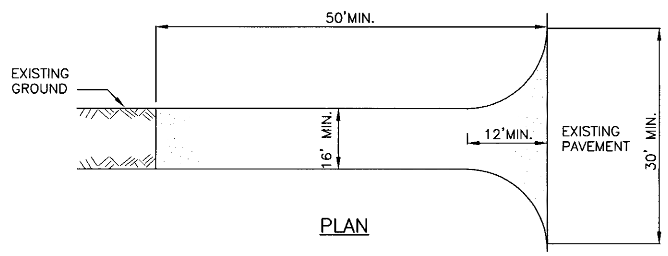
DRAWING NO. 444853-200-C-405
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-405.DWG
PLOT DATE: 5/23/2011 8:54 AM PLOTTED BY: SWALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL, IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



PROFILE



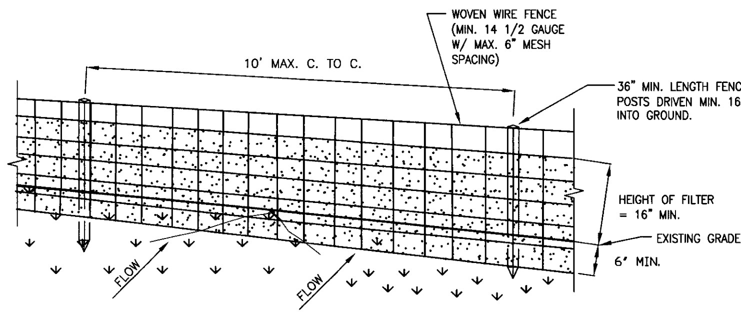
PLAN

NOTES:

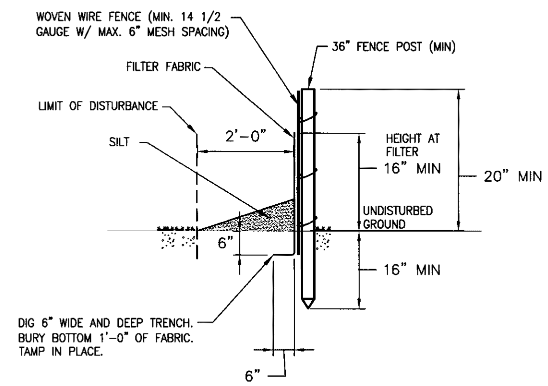
1. A STABILIZED CONSTRUCTION ENTRANCE WILL BE LOCATED AT ALL LOCATIONS WHERE SITE TRAFFIC ENTERS/EXITS PUBLIC ROADS..
2. STABILIZATION GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO GRAVEL PLACEMENT. GEOTEXTILE WILL ALSO PROVIDE SEPARATION.
3. A MINIMUM 6 IN. OF 1 TO 4 IN. CLEAN CRUSHED STONE SHALL BE PLACED TO THE DIMENSIONS INDICATED.
4. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS.
5. PERIODIC TOP-DRESSING WITH ADDITIONAL STONE MAY BE REQUIRED.
6. INSPECTION SHALL BE UNDERTAKEN FOLLOWING RAIN.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



PERSPECTIVE VIEW



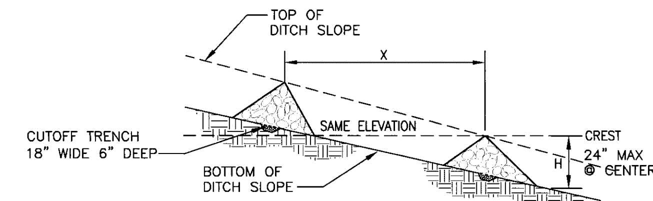
SECTION

NOTES:

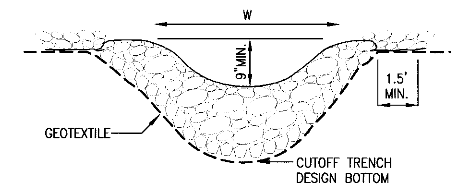
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKA T14N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
6. SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADIENT SIDE OF THE EARTH WORK, ALONG THE SLURRY PIPELINE WHERE SUBSURFACE PIPELINE INSTALLATION AS REQUIRED, AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

SILT FENCE

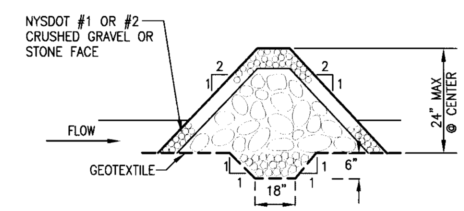
NOT TO SCALE



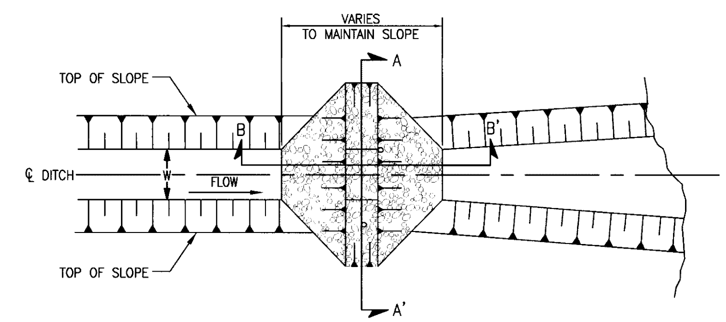
PROFILE



SECTION A–A



SECTION B–B'



PLAN

NOTES:

1. THE CREST OF THE DOWNSTREAM DAM SHALL BE AT THE ELEVATION OF THE TOE OF THE UPSTREAM DAM.
2. X (FT) = H (FT)/SLOPE (FT/FT).
3. SLOPES EXCEEDING 10% SHALL INCLUDE PROTECTION USING A ROLLED EROSION CONTROL PRODUCT (RECP), OR OTHER APPROPRIATE MATERIAL.
4. EXTEND THE STONE A MINIMUM OF 1.5 FT ABOVE THE HIGHEST EXPECTED WATER ELEVATION OR A MINIMUM OF 1.5 FT BEYOND THE LATERAL EXTENT OF THE SWALE, IN ORDER TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR RECP AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. SAND/GRAVEL BAGS MAY BE SUBSTITUTED FOR STONE. BAGS MUST BE FILLED WITH CLEAN SAND/GRAVEL TO PREVENT RECEIVING WATERS FROM BECOMING TURBID.
8. IF SAND/GRAVEL BAGS ARE USED, THEY MUST BE INDIVIDUALLY TIED, DOUBLE BAGGED AND INVERSELY INSERTED. BAGS SHALL LAP THE JOINTS BETWEEN THE BAGS IN THE LAYER BELOW.

CHECK DAM

NOT TO SCALE

NOTES:

1. THE PIPELINE ANCHOR WILL HAVE MINIMAL DISTURBANCE TO THE AREA, SO A SILT FENCE IS NOT NECESSARY. ANY DISTURBED SOIL WILL BE REGRADED, AND THE AREAS WILL BE FERTILIZED, RESEEDED, AND MULCHED AS APPROPRIATE. THE AREAS WILL BE PERIODICALLY INSPECTED AND PROPERLY MAINTAINED.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY XH	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

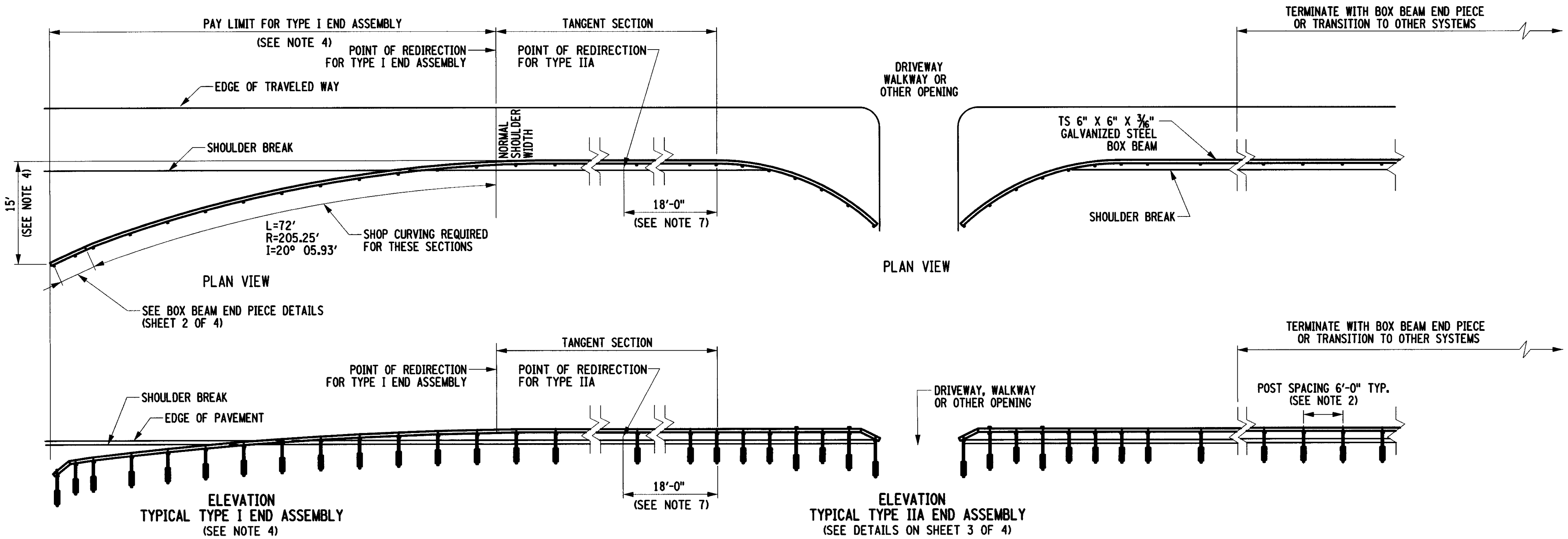
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
EROSION AND SEDIMENT CONTROL DETAILS

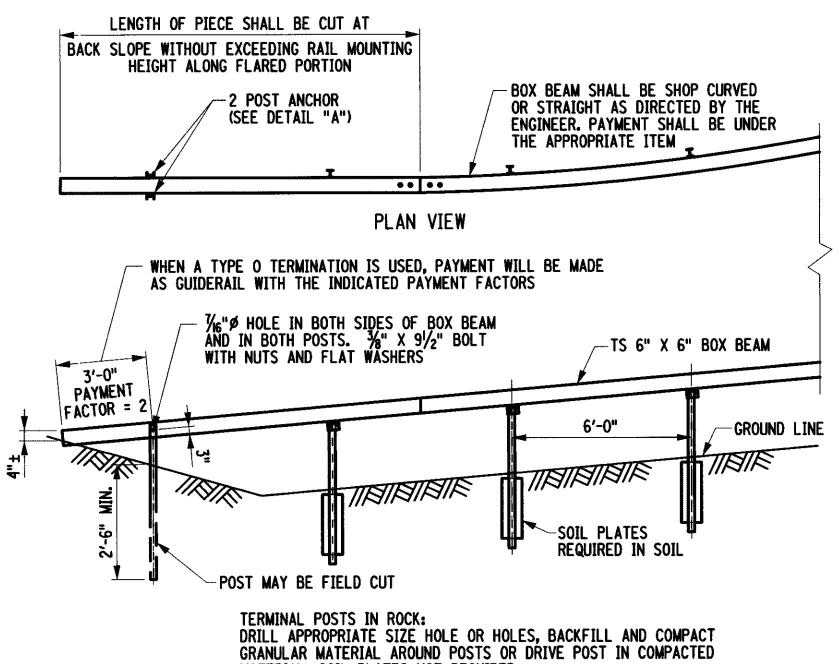
SCALE
NO SCALE

DRAWING NO. 444853-200-C-406
REV. 0

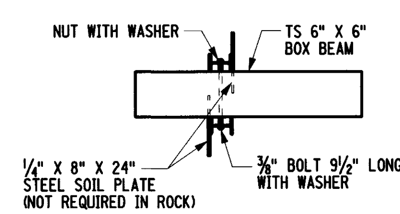
FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\CIVIL\444853-200-C-406.DWG
PLOT DATE: 8/23/2011 6:45 PM PLOTTED BY: SIVALIA, JACK



ELEVATION
TYPICAL LAYOUT



TYPE O END TERMINAL



DETAIL "A" - PLAN VIEW

GENERAL NOTES:

1. POST SPACING SHALL BE 6'-0" EXCEPT WHERE REDUCED POST SPACING IS INDICATED ON THE CONTRACT PLANS. POSTS ARE CONNECTED TO RAIL AT 6'-0" SPACING. WHEN 36" OR 24" REDUCED POST SPACING IS REQUIRED, PAYMENT FOR ADDITIONAL POSTS ASSOCIATED WITH REDUCED POST SPACING WILL BE MADE UNDER EITHER THE PAY ITEM FOR BACKUP POSTS FOR GUIDE RAIL OR THE PAYMENT FACTORS SPECIFIED IN CONTRACT DOCUMENTS.
2. SEE BRIDGE PLANS FOR GUIDE RAIL DETAILS, POST SPACING AND PAY ITEMS FOR TRANSITIONS AND CONNECTIONS TO BRIDGE RAIL.
3. THE LINE OF BOX BEAM GUIDE RAIL, WHEN COMPLETED, SHALL PRESENT A SMOOTH AND PLEASING GRADE LINE IN BOTH HORIZONTAL AND VERTICAL PLANES.
4. THE END MAY BE EXTENDED BY ONE 18'-0" STRAIGHT SECTION, PLACED BETWEEN THE CURVED SECTION AND THE END PIECE, TO MOVE THE END CLOSER TO THE EDGE OF THE CLEAR ZONE.
5. BACKUP MAY REMAIN IN PLACE.
6. THE RAIL MOUNTING HEIGHT OF ALL GUIDE RAIL OR MEDIAN BARRIER PLACED BEHIND CURB (REGARDLESS OF THE CURB HEIGHT OR SPEED) SHALL BE MEASURED FROM THE PAVEMENT SURFACE WHEN THE OFFSET IS 9" OR LESS AND TO THE GROUND SURFACE UNDER THE FACE OF THE RAIL WHEN THE OFFSET IS GREATER.
7. FOR DESIGN SPEEDS UNDER 50 MPH THE POINT OF REDIRECTION WILL BE AT THE POINT OF TANGENCY.

REV: CURVATURE INFORMATION ON TYPE I END ASSEMBLY INCLUDED.

EFFECTIVE DATE: 01/06/2011

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY STANDARD SHEET

BOX BEAM GUIDE RAIL
(SHEET 1 OF 4)

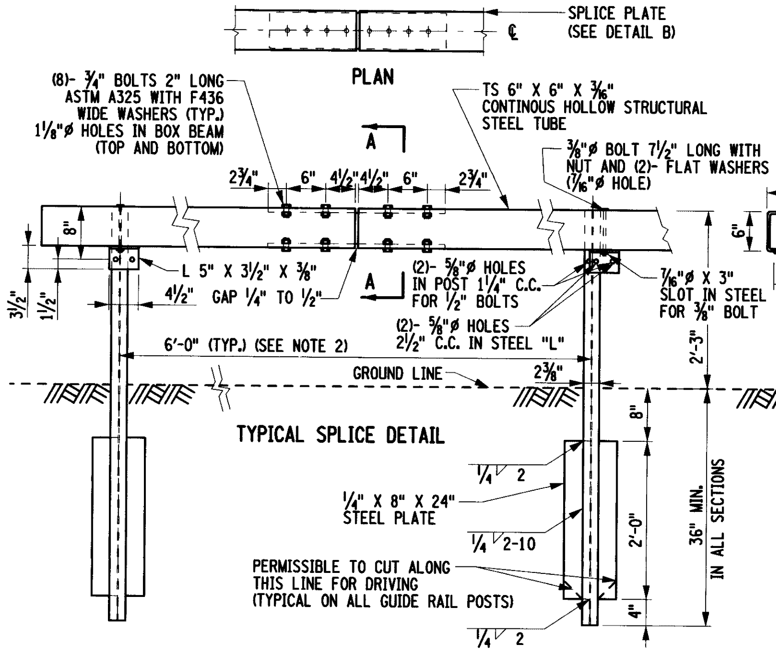
APPROVED AUGUST 26, 2010
/S/ RICHARD W. LEE, P.E.
FOR THE DEPUTY CHIEF ENGINEER (DESIGN)

ISSUED UNDER EB 10-039

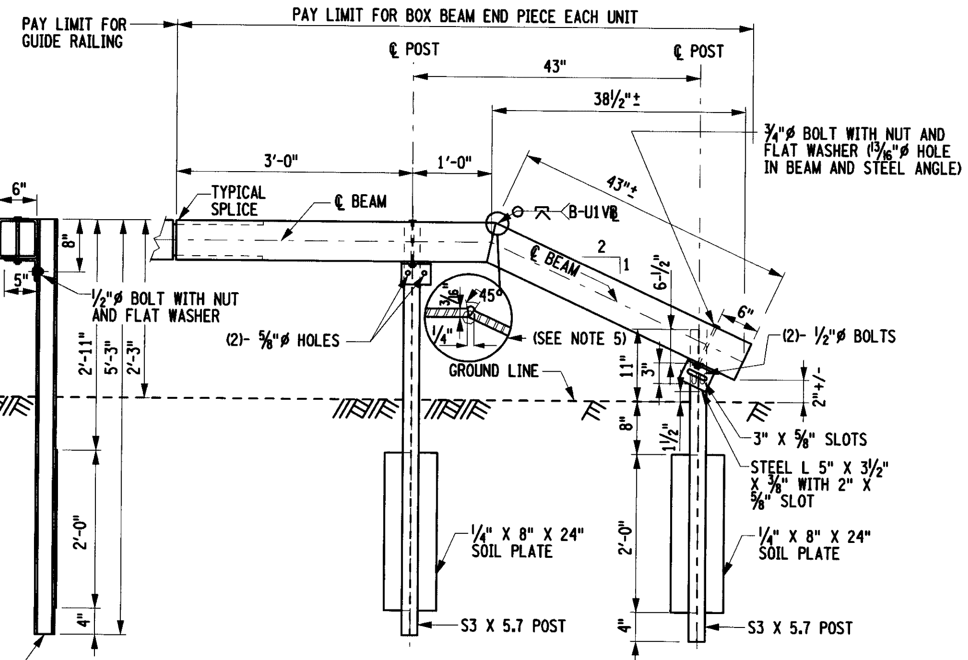
606-04

FILE NAME = 606-0401_010611.dgn
DATE/TIME = 13-OCT-2010 09:26
USER = rlohse

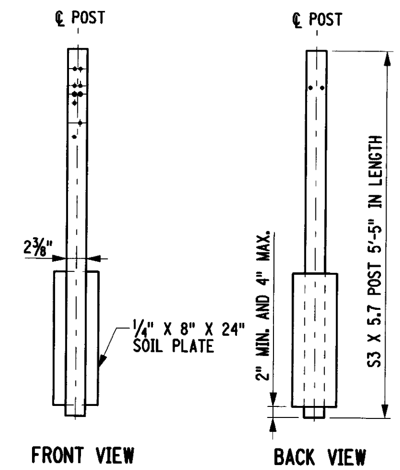
GENERAL NOTES ON SHEET 1 OF 4



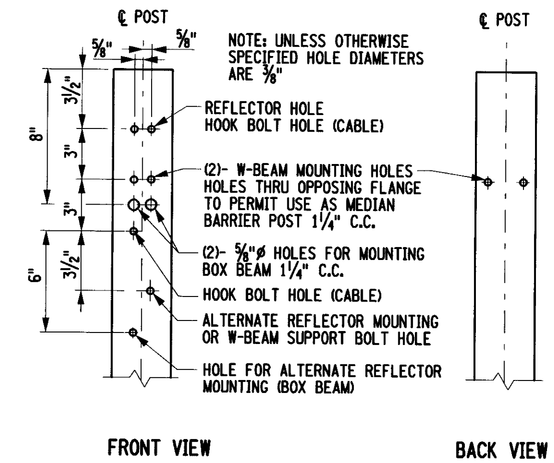
ELEVATION
TYPICAL TANGENT SECTION



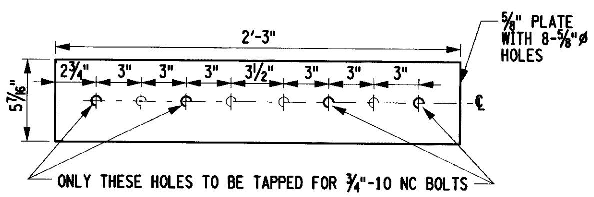
ELEVATION
BOX BEAM END PIECE



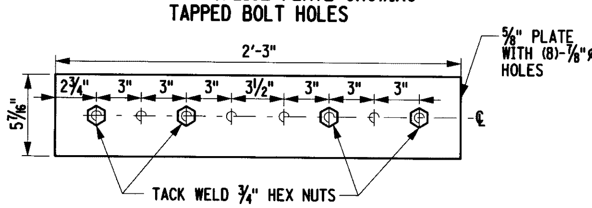
UNIVERSAL POST



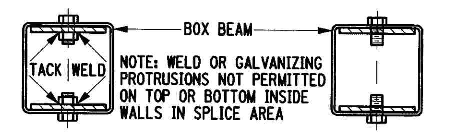
UNIVERSAL POST DETAILS



DETAIL "B" SPLICE PLATE SHOWING TAPPED BOLT HOLES

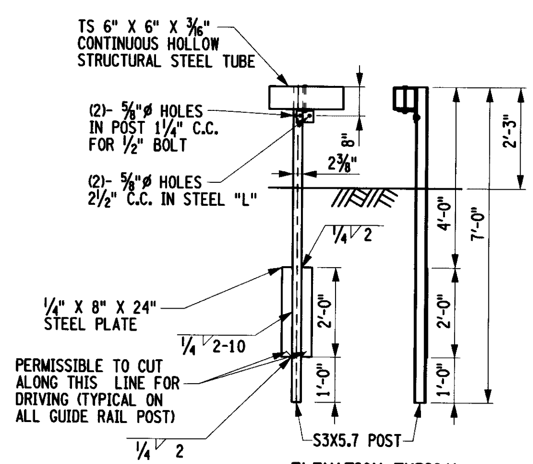


DETAIL "B" SPLICE PLATE SHOWING 3/4" HEX NUTS WELDED TO PLATE

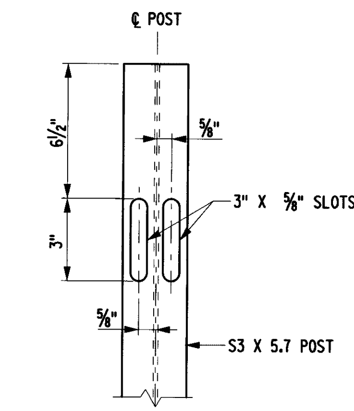


SECTION A-A
SPLICE PLATE SHOWING 3/4" HEX NUTS WELDED TO PLATE

SECTION A-A
SPLICE PLATE SHOWING TAPPED BOLT HOLES



ELEVATION TYPICAL EXTRA LONG POST



TYPE 1 ANCHOR POST DETAIL

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY STANDARD SHEET

BOX BEAM GUIDE RAIL
(SHEET 2 OF 4)

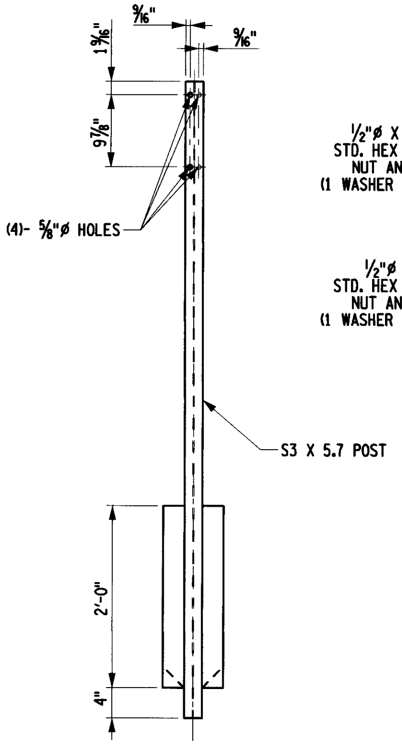
APPROVED JULY 2, 2010
/S/ RICHARD W. LEE, P.E.
FOR THE DEPUTY CHIEF ENGINEER (DESIGN)

ISSUED UNDER EB 10-022

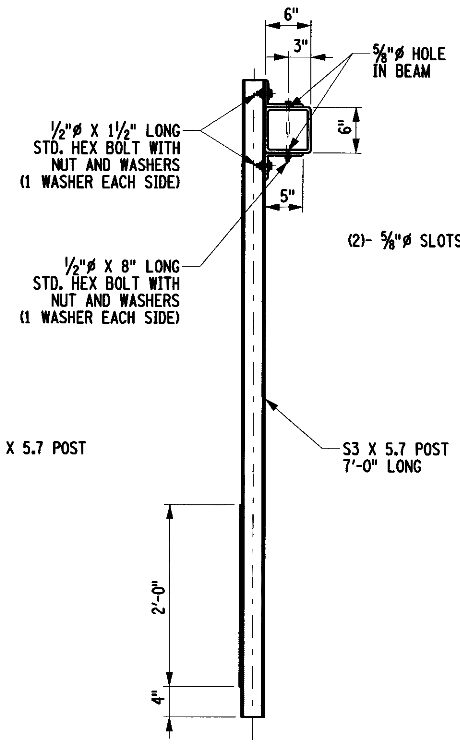
606-04

EFFECTIVE DATE: 01/06/2011

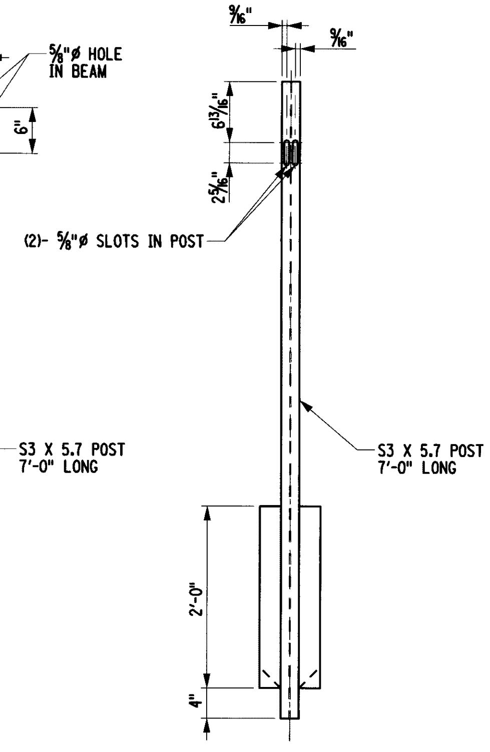
FILE NAME = 606-0402.dgn
DATE/TIME = 09-AUG-2010 14:26
USER = jturley



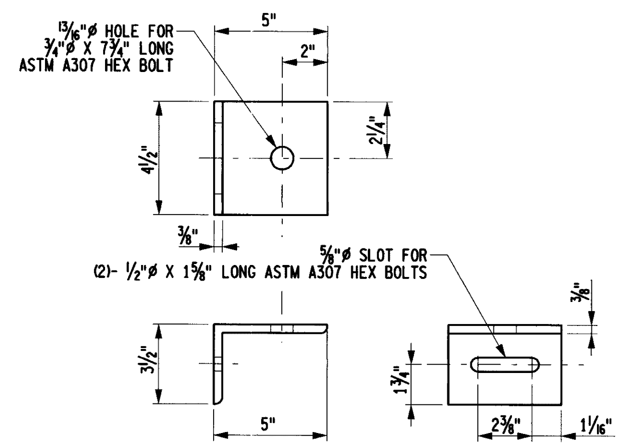
FRONT ELEVATION
POST 2 AND 4



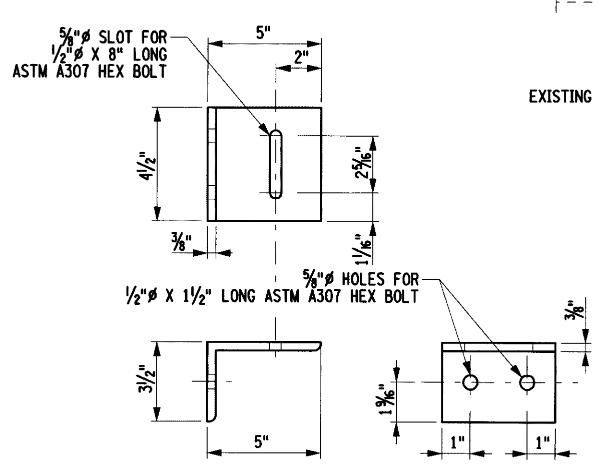
SIDE ELEVATION
POST 2 AND 4



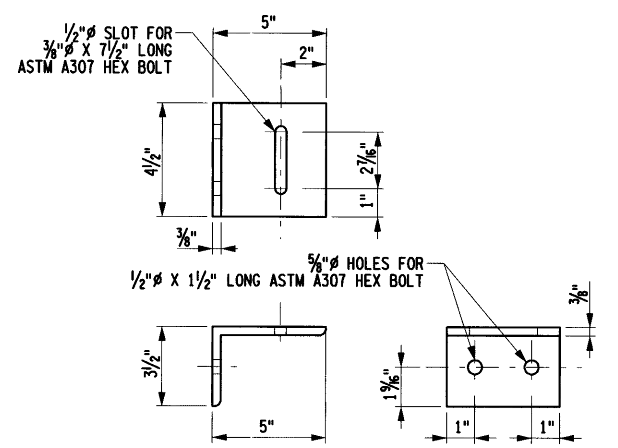
ELEVATION POST 1



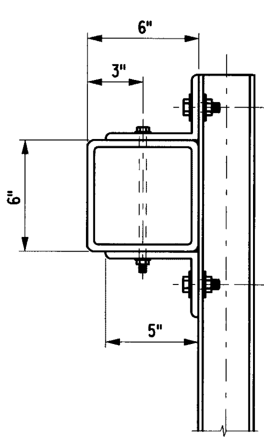
BRACKET DETAILS
POST 1



BRACKET DETAILS
POSTS 2 AND 4

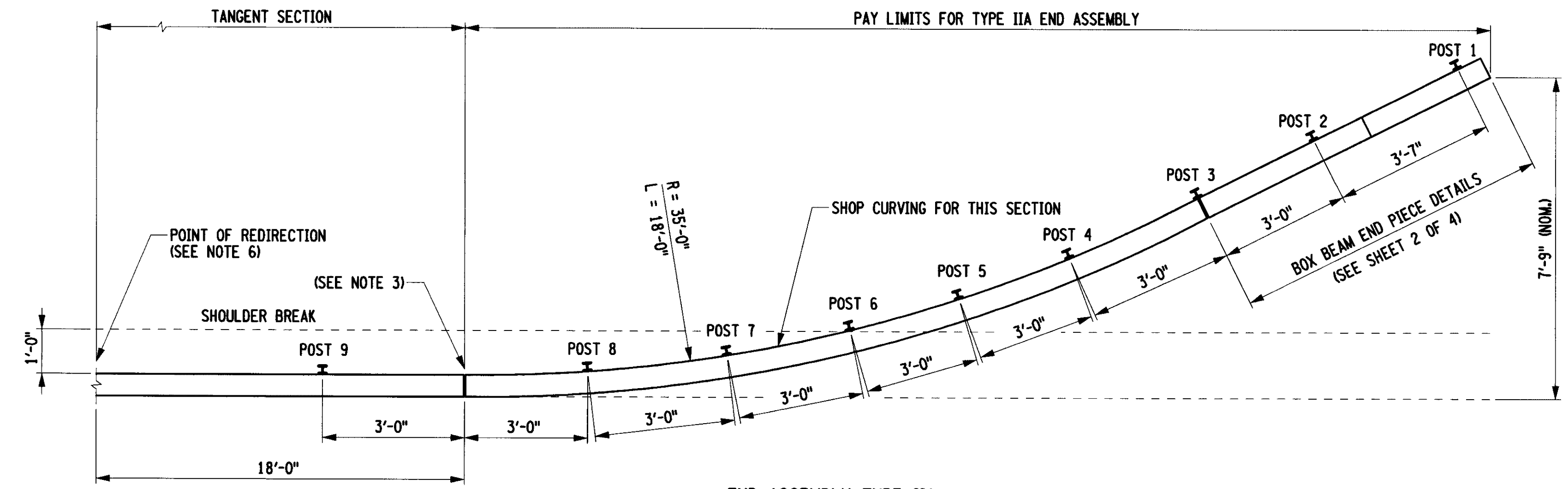


BRACKET DETAILS
POSTS 3, 5, 6, 7, 8 AND 9

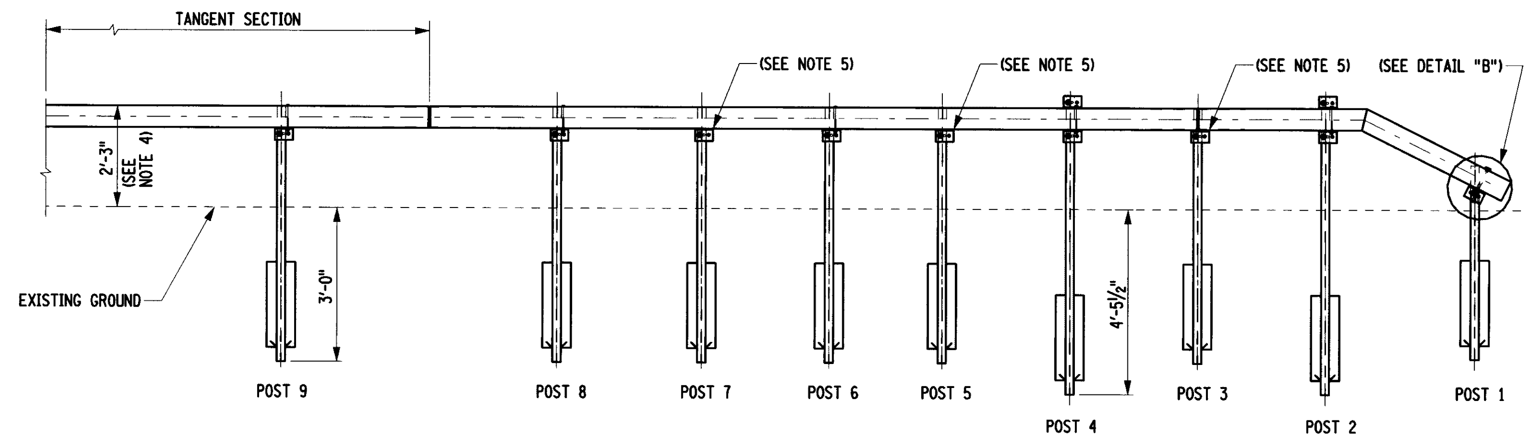


POSTS 2 AND 4 CONNECTION DETAIL
"DETAIL A"
(SEE NOTES 1 AND 2)

GENERAL NOTES ON SHEET 1 OF 4



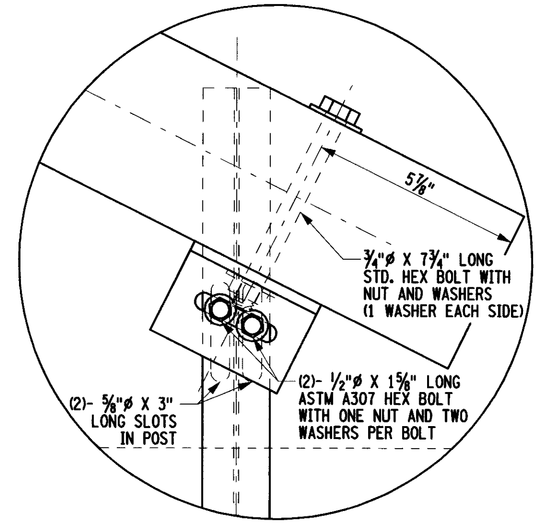
END ASSEMBLY TYPE IIA
PLAN VIEW



END ASSEMBLY TYPE IIA
ELEVATION

TYPE IIA NOTES:

1. POSTS 2, AND 4 SHALL BE EXTRA LONG POSTS. POSTS 3, 5, 6, 7, 8, AND 9 SHALL BE STANDARD LENGTH.
2. POSTS 2 AND 4 SHALL BE FASTENED TO THE RAIL USING DETAIL "A".
3. FOR SIDE SLOPES 1:5 OR FLATTER, THE 18' OF CURVED BOX BEAM MAY BE PROVIDED IN A CURVED PORTION OF A 24' OR 36' PIECE. OTHERWISE, AN 18' SECTION IS TO BE SPLICED AT THE POINT OF TANGENCY.
4. THE DRAWING INDICATES THE TERMINAL INSTALLED ON LEVEL GROUND. WHEN INSTALLED OVER A SLOPE OR DITCH, THE TERMINAL END SHOULD BE PUSHED DOWN WITH THE EQUIVALENT OF APPROXIMATELY 100 LBS EFFORT TO DEPRESS THE TERMINAL DOWN.
5. POSTS 3, 5, AND 7 SHALL NOT BE CONNECTED TO BOX BEAM GUIDE RAIL.
6. FOR DESIGN SPEEDS UNDER 50 MPH THE POINT OF REDIRECTION WILL BE AT THE POINT OF TANGENCY.

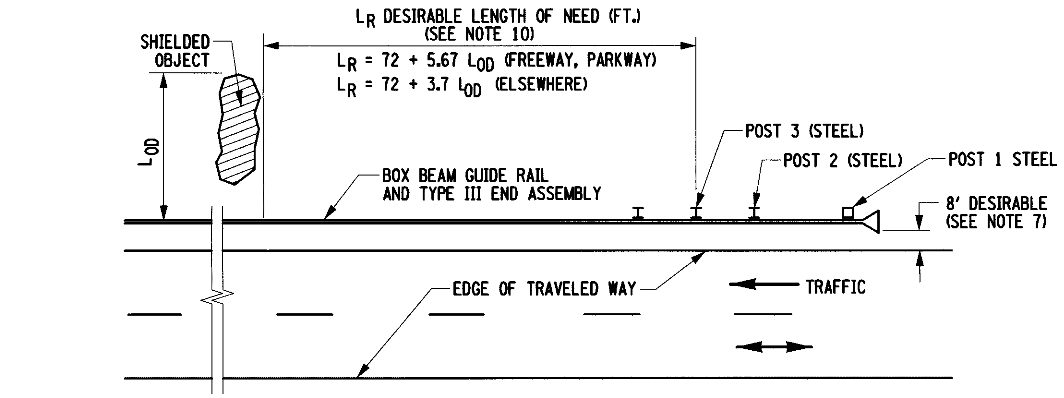


POST 1 CONNECTION DETAIL
"DETAIL B"
(SEE NOTES 1 AND 2)

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
U.S. CUSTOMARY STANDARD SHEET	
BOX BEAM GUIDE RAIL (SHEET 3 OF 4)	
APPROVED JULY 2, 2010 /S/ RICHARD W. LEE, P.E. FOR THE DEPUTY CHIEF ENGINEER (DESIGN)	ISSUED UNDER EB 10-022 606-04

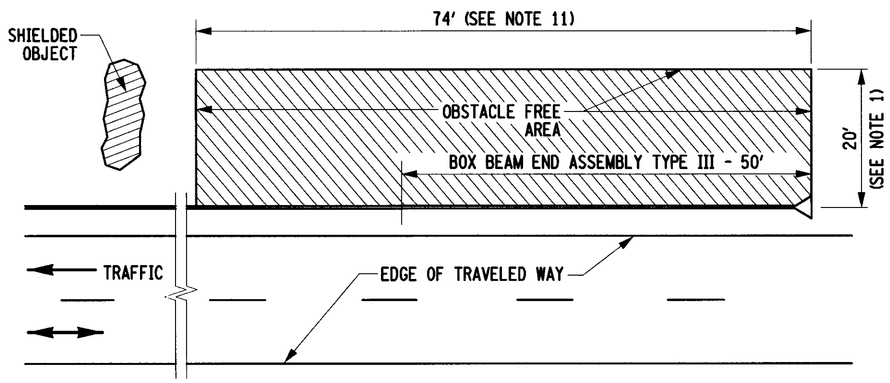
EFFECTIVE DATE: 01/06/2011

FILE NAME = 606-0403.dgn
DATE/TIME = 09-AUG-2010 14:26
USER = jturley



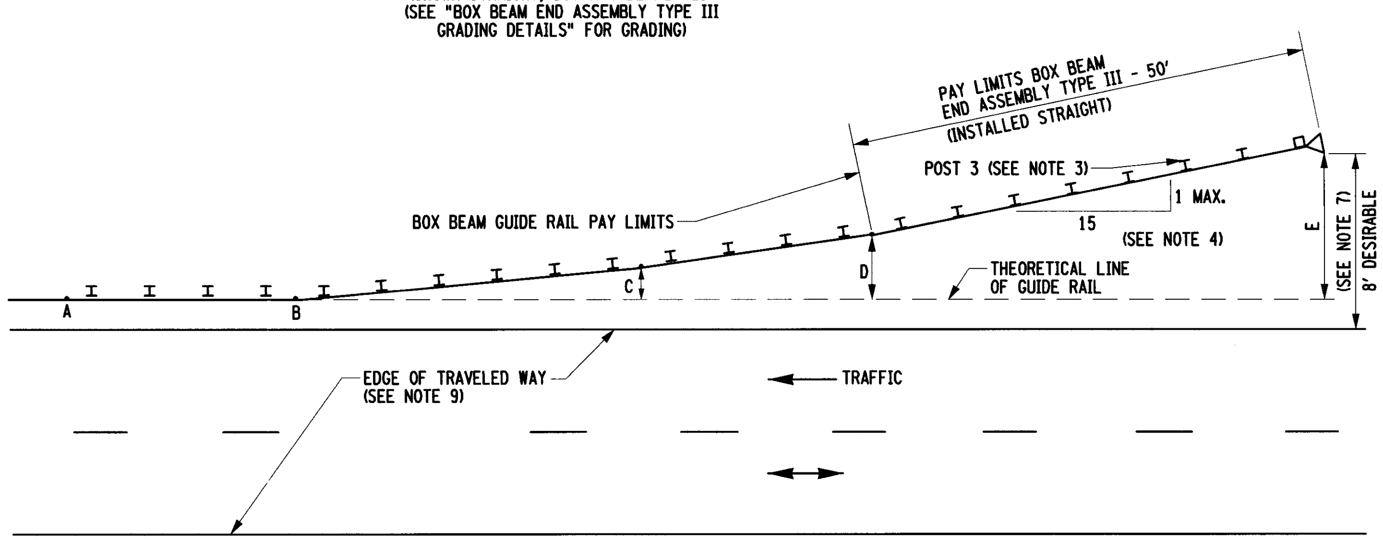
BOX BEAM END ASSEMBLY TYPE III DESIRABLE LENGTH OF NEED DETAIL

(SHOWN STRAIGHT, BUT MAY BE FLARED)
(SEE "BOX BEAM END ASSEMBLY TYPE III GRADING DETAILS" FOR GRADING)



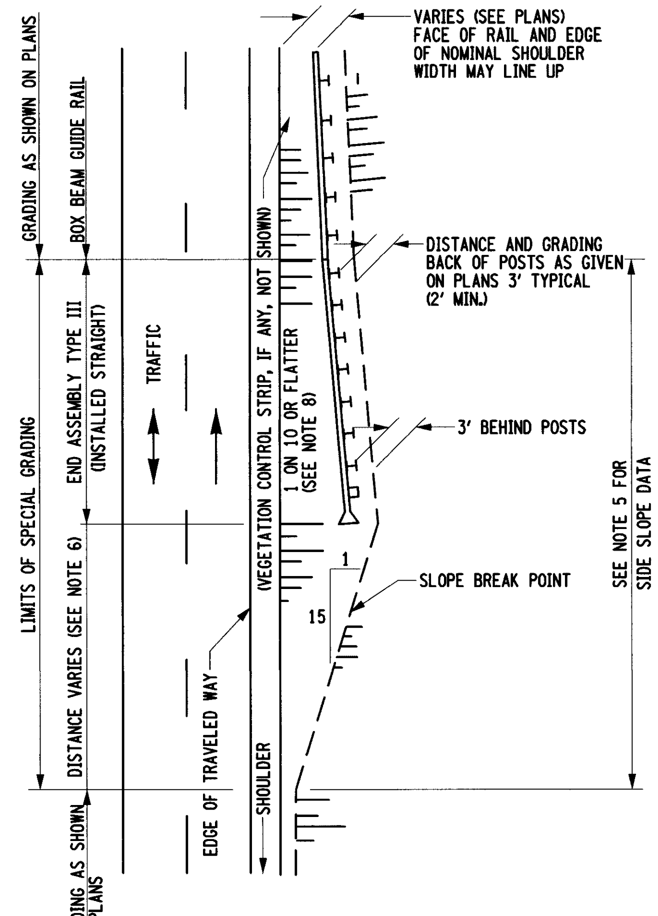
BOX BEAM END ASSEMBLY TYPE III OBSTACLE FREE AREA DETAIL

(SHOWN STRAIGHT, BUT MAY BE FLARED)
(SEE "BOX BEAM END ASSEMBLY TYPE III GRADING DETAILS" FOR GRADING)



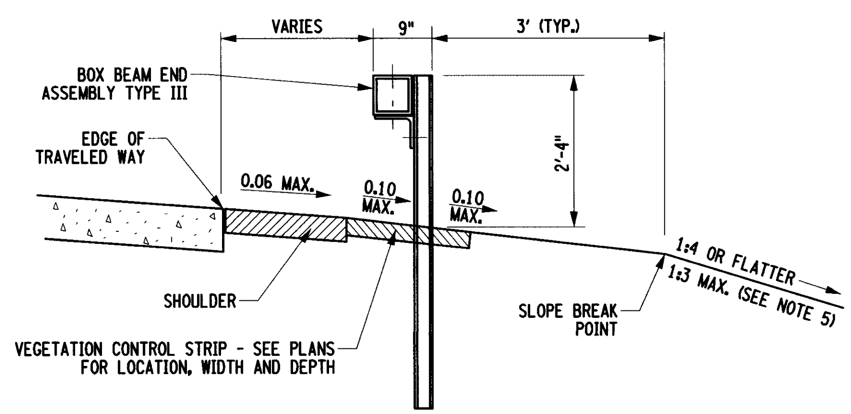
METHOD FOR INTRODUCING FLARE

(SHOWN HERE WITH ANGLES AT JOINTS B, C, AND D. VEGETATION CONTROL STRIP, IF ANY, AND SHOULDER NOT SHOWN)
(SEE "BOX BEAM END ASSEMBLY TYPE III GRADING DETAILS" FOR GRADING)



BOX BEAM END ASSEMBLY TYPE III GRADING DETAILS

(DETAIL APPLIES TO BOTH FLARED AND TANGENT INSTALLATIONS)



SECTION THROUGH SPECIAL GRADING AREA

NOTES:

1. MAY BE REDUCED TO WIDTH OF DESIGN CLEAR ZONE.
2. BOX BEAM END ASSEMBLY TYPE III SHALL BE FABRICATED IN ACCORDANCE WITH §710-24 BOX BEAM END ASSEMBLY TYPE III. MATERIALS DETAILS ARE REQUIRED.
3. REDIRECTION BEGINS AT THIS POST (NO. 3). BOX BEAM END ASSEMBLY TYPE III "GATES" FROM NOSE ASSEMBLY TO POST 3, WHICH MEANS VEHICLES HITTING TYPE III END ASSEMBLY UPSTREAM OF POST 3 PENETRATE THE TERMINAL. POST 3 IS THE BEGINNING OF LENGTH OF NEED.
4. BOX BEAM END ASSEMBLY TYPE III SHALL BE INSTALLED WITHOUT CURVATURE OR BEND. MAX FLARE RATE IS 1 ON 15 (3° - 50'). FLARE TO BE DEVELOPED AT JOINTS DOWNSTREAM OF THE TYPE III END ASSEMBLY. SEE TABLE 1 FOR DIMENSIONS.
5. EMBANKMENT OR FORESLOPES WITHIN SPECIAL GRADING LIMITS SHOULD BE PREFERABLY 1 ON 4 OR FLATTER, MAXIMUM 1 ON 3.
6. THIS DISTANCE VARIES. LENGTH TO BE 15, OR MORE, TIMES THE DIFFERENCE IN EMBANKMENT WIDTHS AT A TYPICAL POINT WELL UPSTREAM OF THE END ASSEMBLY AND THE EMBANKMENT WIDTH AT THE NOSE ASSEMBLY.
7. 8' OR GREATER OFFSET DESIRABLE BETWEEN EDGE OF TRAVELED WAY AND THE SIDE OF THE TYPE III END ASSEMBLY MEASURED AT NOSE ASSEMBLY.
8. GRADING TO BE 1:10 OR FLATTER FROM EDGE OF SHOULDER TO SLOPE BREAK POINT.
9. SHOULDER PAVEMENT AND VEGETATION CONTROL STRIP, IF ANY, NOT SHOWN.
10. LENGTH OF NEED DOES NOT NEED TO EXCEED 360' ON FACILITIES WITH OPERATING SPEED ≥ 55 MPH OR 260' WHEN OPERATING SPEED IS ≥ 45 MPH BUT < 55 MPH.
11. WITH PERMISSION OF THE ENGINEER, THIS LENGTH MAY BE REDUCED TO 50' IF NECESSITATED BY R.O.W. OR ENVIRONMENTAL CONSIDERATIONS.
12. FLARE ACHIEVED AT THE JOINTS- APPROXIMATELY 1° PER JOINT. SEE TABLE 1 BELOW FOR OFFSETS TO THE JOINTS FROM THE THEORETICAL LINE OF GUIDE RAIL FOR COMMON RAIL LENGTHS.

TABLE 1

OFFSETS FROM THE THEORETICAL LINE OF RAIL TO VARIOUS JOINTS AND END PLATE FOR COMMON LENGTHS

RAIL LENGTHS	JOINTS				END PLATE DISTANCE E
	A	B	C	D	
18'-0"	----	----	----	0	4"
	----	----	0	3½"	1'-5½"
	----	0	3½"	11"	2'-10½"
	0	3½"	11"	1'-9½"	4'-7"
24'-0"	----	----	----	0	4"
	----	----	0	4¾"	1'-6½"
	----	0	4¾"	1'-2½"	3'-2"
	0	4¾"	1'-2½"	2'-4¾"	5'-2½"
30'-0"	----	----	----	0	4"
	----	----	0	6"	1'-7½"
	----	0	6"	1'-6"	3'-5¾"
	0	6"	1'-6"	3'	5'-9½"
36'-0"	----	----	----	0	4"
	----	----	0	7"	1'-9"
	----	0	7"	1'-9½"	3'-9½"
	0	7"	1'-9½"	3'-7½"	6'-4¾"

---- INDICATES NO FLARE INTRODUCED AT THIS JOINT AND NO OFFSET.
0 INDICATES ANGLE AT JOINT BUT NO OFFSET FROM THE THEORETICAL LINE OF GUIDE RAIL.
X" INDICATES THERE IS BOTH AN ANGLE AT THE JOINT AND THE JOINT IS OFFSET FROM THE THEORETICAL LINE OF GUIDE RAIL 33'

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY STANDARD SHEET

BOX BEAM END ASSEMBLY TYPE III GRADING, PAYMENT, AND LAYOUT DETAILS

APPROVED OCTOBER 05, 2009
/S/ RICHARD W. LEE, P.E.
FOR THE DEPUTY CHIEF ENGINEER (DESIGN)

ISSUED UNDER EB 09-025

606-06

EFFECTIVE DATE: 01/07/10

FILE NAME = 606-06_010710.dgn
DATE/TIME = 09-OCT-2009 10:46
USER = jturley

WORK ZONE TRAFFIC CONTROL LEGEND

SYMBOL	DESCRIPTION
	ARROW PANEL
	ARROW PANEL, CAUTION MODE
	ARROW PANEL
	PORTABLE VARIABLE MESSAGE SIGN (PVMS)
	CHANNELIZING DEVICE
	CRASH CUSHION/TEMPORARY IMPACT ATTENUATOR
	DIRECTION OF TEMPORARY TRAFFIC DETOUR
	DIRECTION OF TRAFFIC
	FLAGGER
	FLAG TREE
	LUMINAIRE
	PAVEMENT MARKINGS THAT SHALL BE REMOVED OR COVERED
	SIGN, TEMPORARY
	TEMPORARY CONCRETE BARRIER
	TEMPORARY CONCRETE BARRIER WITH WARNING LIGHTS
	TRAFFIC OR PEDESTRIAN SIGNAL
	TYPE III BARRICADE
	WARNING LIGHTS
	WORK SPACE
	WORK VEHICLE
	SHADOW OR BARRIER VEHICLE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

PREPARED BY: ON:	ALTERED BY: ON:

TABLE NY1-A
BARRIER VEHICLE USE REQUIREMENTS
(LONG TERM, INTERMEDIATE TERM AND SHORT TERM STATIONARY CLOSURES)

CLOSURE TYPE	EXPOSURE CONDITION [1]	USE REQUIREMENTS [4]			
		FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)		
			≥ 45 MPH	35-40 MPH	≤ 30 MPH
LANE CLOSURE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED [3]	REQUIRED [3]	REQUIRED [3]	OPTIONAL [2]
	NON-TRAVERSABLE HAZARD (IE. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED	REQUIRED [3]	REQUIRED [3]	OPTIONAL [2]	OPTIONAL [2]
SHOULDER CLOSURE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED [3]	REQUIRED [3]	OPTIONAL [2]	OPTIONAL [2]
	NON-TRAVERSABLE HAZARD (IE. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED	REQUIRED [3]	OPTIONAL [2]	OPTIONAL [2]	OPTIONAL [2]

1. THE EXPOSURE CONDITIONS DESCRIBED IN TABLE NY1-A ASSUMES THERE IS NO POSITIVE PROTECTION (TEMPORARY TRAFFIC BARRIER) PRESENT. WHERE WORKERS OR HAZARADS ARE PROTECTED BY A TEMPORARY TRAFFIC BARRIER, BARRIER VEHICLES ARE NOT REQUIRED.
2. WHERE THE REQUIREMENT IS "OPTIONAL", EITHER A BARRIER VEHICLE OR THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
3. WHERE BARRIER VEHICLE USE IS "REQUIRED" THE STANDARD BUFFER SPACE SHALL ALSO BE PROVIDED. REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE BARRIER VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE BARRIER VEHICLE SHALL BE REPOSITIONED ACCORDINGLY. BARRIER VEHICLES PROTECTING NON-TRAVERSABLE HAZARDS SHALL REMAIN IN PLACE DURING BOTH WORKING AND NON-WORKING HOURS UNTIL THE HAZARD NO LONGER EXISTS. EXCEPTIONS TO THESE REQUIREMENTS MAY BE MADE, AS APPROVED BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE WHERE BARRIER VEHICLE PLACEMENT WOULD BE INEFFECTIVE OR WOULD INTERFERE WITH THE SAFE OPERATION OF TRAFFIC.
4. BARRIER VEHICLES ARE NOT REQUIRED FOR MILLING AND/OR PAVING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.

TABLE NY1-B
SHADOW VEHICLE USE REQUIREMENTS
(MOBILE CLOSURES[1])

CLOSURE TYPE	EXPOSURE CONDITION	USE REQUIREMENTS			
		FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)		
			≥ 45 MPH	35-40 MPH	≤ 30 MPH
LANE CLOSURE	WHEN ANY WORKERS, VEHICLES, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED [2,4]	REQUIRED [2,4]	REQUIRED [2,4]	REQUIRED [3,4]
SHOULDER CLOSURE	WHEN ANY WORKERS, VEHICLES, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED [2,4]	REQUIRED [2,4]	REQUIRED [3,4]	REQUIRED [3,4]

1. A MOBILE CLOSURE SHALL BE USED FOR ANY WORK ACTIVITY THAT MOVES CONTINUOUSLY OR INTERMITTENTLY ALONG THE TRAVELED WAY OR SHOULDER SLOWER THAN THE PREVAILING SPEED OF TRAFFIC. CHANNELIZING DEVICES ARE NOT USED FOR MOBILE CLOSURES.
2. SHADOW VEHICLES SHALL BE EQUIPPED WITH AN APPROVED REAR MOUNTED ATTENUATOR (TRUCK MOUNTED OR TRAILER MOUNTED) FOR THE FOLLOWING MOBILE CLOSURES: LANE CLOSURES ON FREEWAYS, LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 35 MPH OR MORE, SHOULDER CLOSURES ON FREEWAYS, AND SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE.
3. FOR MOBILE LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 30 MPH OR LESS AND MOBILE SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 40 MPH OR LESS, SHADOW VEHICLES ARE NOT REQUIRED TO BE EQUIPPED WITH A REAR MOUNTED ATTENUATOR.
4. A SHADOW VEHICLE IS USED TO PROTECT EXPOSED WORKERS (ON FOOT OR IN A VEHICLE) AND SHALL BE REQUIRED FOR ALL MOBILE CLOSURES. SHADOW VEHICLE REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE SHADOW VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. ADDITIONAL SHADOW VEHICLES MAY BE REQUIRED TO PROMOTE THE SAFE OPERATION OF TRAFFIC AND THE INCREASED PROTECTION OF EXPOSED WORKERS, AS DIRECTED BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE.

TABLE 6H-4 FORMULAS FOR DETERMINING TAPER LENGTHS

SPEED LIMIT (S)	TAPER LENGTH (L) (FT.)
40 MPH OR LESS	$L = WS^2 / 60$
45 MPH OR MORE	$L = WS$

L = TAPER LENGTH
W = WIDTH OF OFFSET (FT.)
S = PRECONSTRUCTION POSTED SPEED LIMIT (MPH)

STANDARD TAPER LENGTHS

LATERAL SHIFT OF TRAFFIC FLOW PATH	TEMPORARY TRAFFIC CONTROL ZONE PRE CONSTRUCTION POSTED SPEED LIMIT								
	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH
4	45	60	85	110	180	200	220	240	260
5	55	75	105	135	225	250	275	300	325
6	65	90	125	160	270	300	330	360	390
7	75	105	145	190	315	350	385	420	455
8	85	120	165	215	360	400	440	480	520
9	95	135	185	240	405	450	495	540	585
10	105	150	205	270	450	500	550	600	650
11	115	165	225	295	495	550	605	660	715
12	125	180	245	320	540	600	660	720	780

WORK DURATION DEFINITIONS

LONG-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN 3 CONSECUTIVE DAYS.

INTERMEDIATE-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.

SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

TABLE NY2-A
PLACEMENT DISTANCE FOR BARRIER VEHICLES

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	PLACEMENT DISTANCE (FT.) BARRIER VEHICLES*			
	(18000 LBS.)		(24000 LBS.)	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
> 55	100 FT.	200 FT.	100 FT.	200 FT.
45 - 55	100 FT.	200 FT.	85 FT.	165 FT.
< 45	85 FT.	165 FT.	50 FT.	100 FT.

AS DEFINED IN NYSDOT STANDARD SPECIFICATION 619:

BARRIER VEHICLE: VEHICLE USED FOR STATIONARY SHOULDER CLOSURES, LANE CLOSURES AND OTHER STATIONARY WORK ZONES.

MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

TABLE NY2-B
PLACEMENT DISTANCE FOR SHADOW VEHICLES

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	PLACEMENT DISTANCE (FT.) SHADOW VEHICLES**			
	(18000 LBS.)		(24000 LBS.)	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
> 55	230 FT.	330 FT.	180 FT.	280 FT.
45 - 55	180 FT.	280 FT.	150 FT.	250 FT.
< 45	100 FT.	200 FT.	100 FT.	200 FT.

AS DEFINED IN NYSDOT STANDARD SPECIFICATION 619:

SHADOW VEHICLE: VEHICLE USED FOR MOBILE OR SHORT DURATION WORK OPERATIONS.

MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

TABLE 6C-2
LONGITUDINAL BUFFER SPACE

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	DISTANCE
25	155 FT.
30	200 FT.
35	250 FT.
40	305 FT.
45	360 FT.
50	425 FT.
55	495 FT.
60	570 FT.
65	645 FT.

TABLE 6C-3
TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH (L)
MERGING TAPER	L
SHIFTING TAPER	L/2 MINIMUM
SHOULDER TAPER	L/3 MINIMUM
ONE-LANE, TWO-WAY TRAFFIC TAPER	100 FT. MAXIMUM
DOWNSTREAM TAPER	100 FT. PER LANE

TABLE NY6H-3
ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT.)	B (FT.)	C (FT.)	XX	YY
URBAN (≤30 MPH*)	100	100	100	AHEAD	AHEAD
URBAN (35-40 MPH*)	200	200	200	AHEAD	AHEAD
URBAN (≥45 MPH*)	350	350	350	1000 FT	AHEAD
RURAL	500	500	500	1500 FT	1000 FT
EXPRESSWAY / FREEWAY	1000	1500	2640	1 MILE	1/2 MILE

* PRECONSTRUCTION POSTED SPEED LIMIT

URBAN: (MEETS MORE THAN 1 OF THE FOLLOWING CRITERIA) SIDEWALKS, BICYCLE USAGE, CURBING, CLOSED DRAINAGE SYSTEMS, DRIVEWAY DENSITIES GREATER THAN 24 DRIVEWAYS/MI, MINOR COMMERCIAL DRIVEWAY DENSITIES OF 10 DRIVEWAYS/MI OR GREATER, MAJOR COMMERCIAL DRIVEWAYS, NUMEROUS RIGHT OF WAY CONSTRAINTS, HIGH DENSITY OF CROSS STREETS, 85TH PERCENTILE SPEEDS OF 45 MPH OR LESS.

RURAL:
ANY AREA NOT EXHIBITING MORE THAN ONE OF ABOVE CHARACTERISTICS.

EXPRESSWAY:
DIVIDED HIGHWAYS FOR THROUGH TRAFFIC WITH FULL OR PARTIAL CONTROL OF ACCESS AND GENERALLY WITH GRADE SEPARATIONS AT MAJOR CROSSROADS.

FREEWAYS/INTERSTATE:
LOCAL OR INTERREGIONAL HIGH-SPEED, DIVIDED, HIGH-VOLUME FACILITIES WITH FULL OR PARTIAL CONTROL OF ACCESS.

TABLE 619-4
FLARE RATES FOR POSITIVE BARRIER

TYPE OF POSITIVE BARRIER	POSTED SPEED LIMIT				
	30 MPH	40 MPH	50 MPH	55 MPH	65 MPH
TEMPORARY CONCRETE BARRIER	8:1	11:1	14:1	16:1	20:1
BOX BEAM OR HEAVY POST CORRUGATED BEAM	7:1	9:1	11:1	12:1	15:1

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

COUNTY:

PIN

PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

CONTRACT NUMBER

WORK ZONE TRAFFIC CONTROL

LEGEND AND TABLES

R3-11-8/6/09

DRAWING NO. WZTC-

SHEET NO.

DOCUMENT NAME: USC_619-11_R3 MODIFIED STANDARD.DGN

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 03

CHECKED BY

DRAFTED BY

ESTIMATED BY

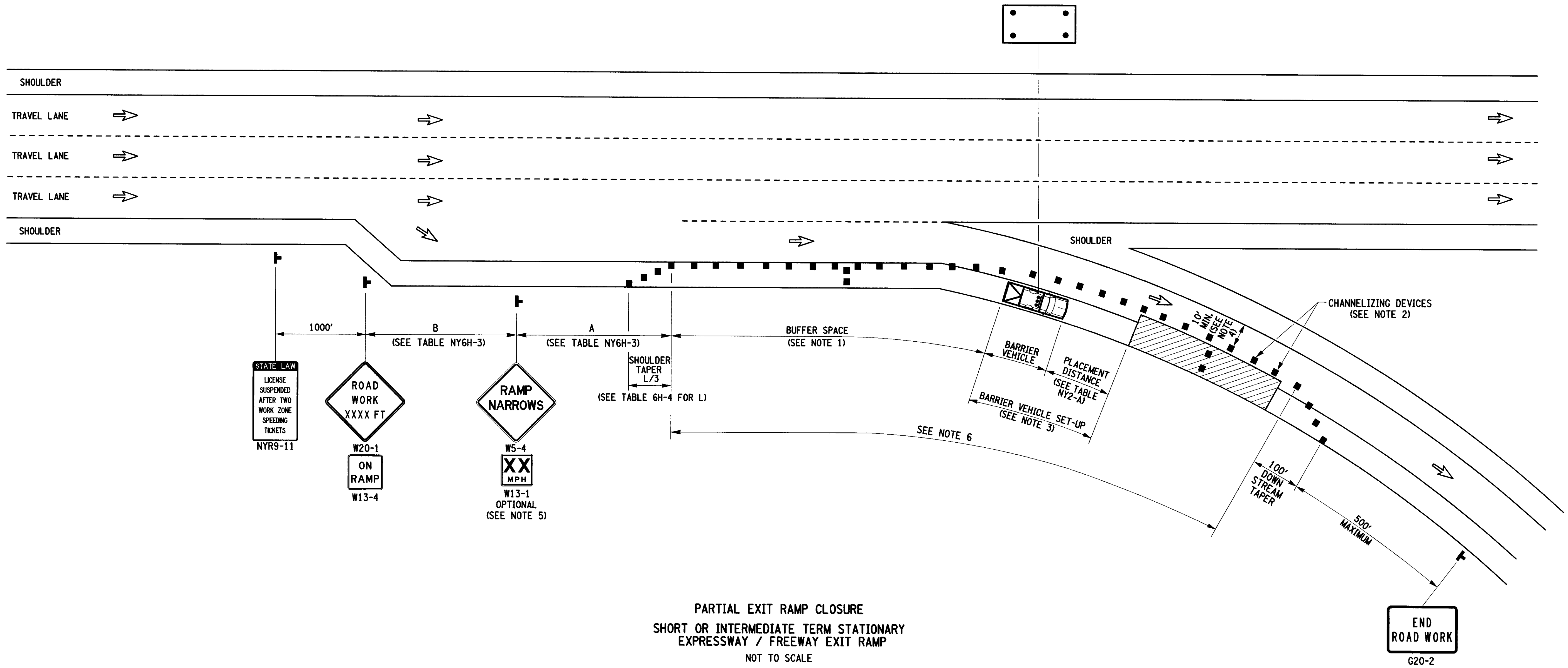
CHECKED BY

DESIGNED BY

JOB MANAGER

DESIGN SUPERVISOR

FILE NAME = USC_619-11_R3 MODIFIED STANDARD.DGN
DATE/TIME = 06-DEC-2010 11:17
USER = tspensieri



PARTIAL EXIT RAMP CLOSURE

SHORT OR INTERMEDIATE TERM STATIONARY
EXPRESSWAY / FREEWAY EXIT RAMP

NOT TO SCALE

NOTES:

1. NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME. FOR BUFFER SPACE LENGTH, SEE TABLE 6C-2 ON THE "LEGEND AND TABLES" DRAWING.
2. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL BE 40' MAXIMUM FOR POSTED SPEED LIMITS 40 MPH OR GREATER AND 20' MAXIMUM FOR POSTED SPEED LIMITS 35 MPH OR LESS.
3. FOR BARRIER VEHICLE USE REQUIREMENTS SEE TABLES NY1-A AND NY2-A ON THE "LEGEND AND TABLES" DRAWING.
4. TRUCK OFF-TRACKING SHOULD BE CONSIDERED WHEN DETERMINING WHETHER THE MINIMUM LANE WIDTH OF 10' IS ADEQUATE.
5. AN ADVISORY SPEED PLAQUE (W13-1) MAY BE APPROPRIATE FOR THE 'RAMP NARROWS' WORK ZONE CONDITION, ALSO TAKING INTO ACCOUNT EXISTING CONDITIONS SUCH AS THE EXISTING POSTED ADVISORY SPEED FOR THE RAMP/EXIT AND THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY ADVISORY SPEED TO BE POSTED.
6. FOR SHOULDERS HAVING A WIDTH OF 8' OR GREATER, TRANSVERSE DEVICES ARE REQUIRED AT 800' INTERVALS PER 619 STANDARD SPECIFICATIONS. DEVICE LOCATIONS SHOWN IN DRAWING FOR ILLUSTRATIVE PURPOSES ONLY. FIRST SET TO BE INSTALLED 800' FROM DOWNSTREAM END OF SHOULDER TAPER. DEVICES THAT WOULD BE LOCATED WITHIN 700' OF BARRIER VEHICLE WILL NOT BE REQUIRED. 800' SPACING INTERVAL STARTS OVER DOWNSTREAM OF BARRIER VEHICLE.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

SEE "LEGEND AND TABLES" DRAWING FOR LEGEND OF SYMBOLS AND/OR LETTER CODES USED IN THIS DRAWING.

PREPARED BY: ON:	ALTERED BY: ON:

AS BUILT REVISIONS DESCRIPTION OF WORK: SIGNATURE DATE	COUNTY:	PIN PS&E DATE	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PARTIAL EXIT RAMP CLOSURE EXPRESSWAY / FREEWAY R3-24-8/7/09	CONTRACT NUMBER DRAWING NO. WZTC- SHEET NO.

DOCUMENT NAME: USC_619-24_R3 MODIFIED STANDARD.DGN

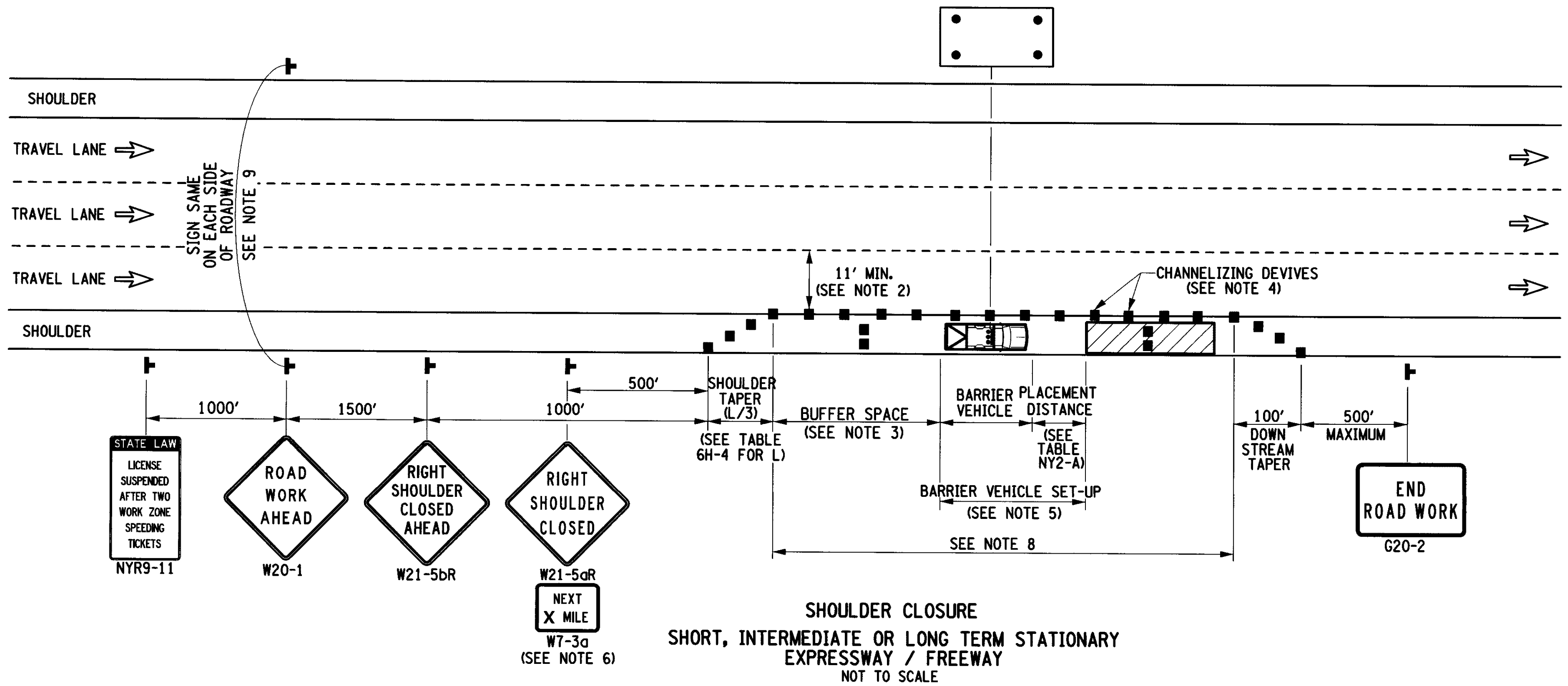
NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 03

CHECKED BY — DRAFTED BY — ESTIMATED BY — CHECKED BY — DESIGNED BY — JOB MANAGER — DESIGN SUPERVISOR

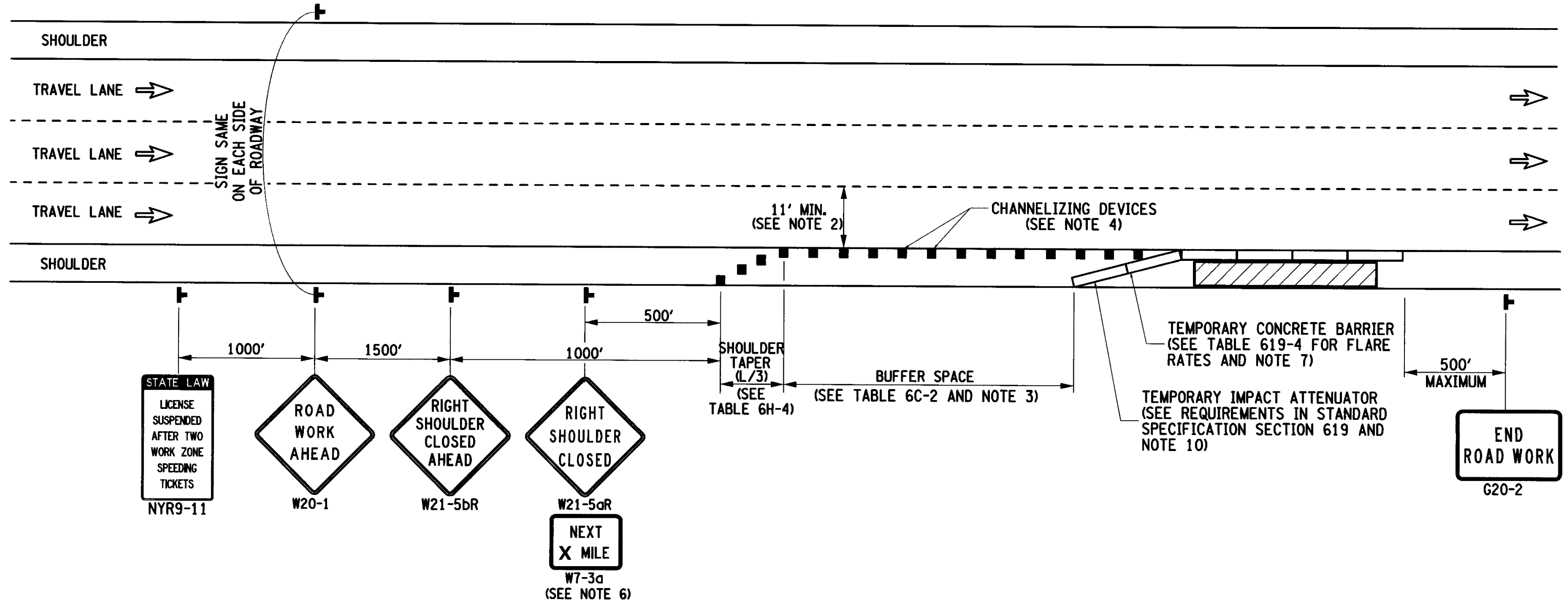
FILE NAME = USC_619-24_R3 MODIFIED STANDARD.DGN
DATE/TIME = 06-DEC-2010 11:17
USER = tspensieri

NOTES:

1. LEFT SHOULDER CLOSURES ARE SYMMETRICAL. SUBSTITUTE LEFT SHOULDER CLOSED AHEAD SIGN (W21-5bL) AND LEFT SHOULDER CLOSED SIGN (21-5aL) FOR RIGHT SHOULDER CLOSED SIGNS (W21-5bR & W21-5aR).
2. WHEN THE MINIMUM LANE WIDTH OF 11' CANNOT BE MAINTAINED DUE TO A SHOULDER CLOSURE, USE THE DETAILS FOR SHORT, INTERMEDIATE, OR LONG TERM STATIONARY SINGLE LANE CLOSURES.
3. NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME. FOR BUFFER SPACE LENGTH, SEE TABLE 6C-2 ON THE "LEGEND AND TABLES" DRAWING.
4. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL BE 40' MAXIMUM FOR POSTED SPEED LIMITS 40 MPH OR GREATER AND 20' MAXIMUM FOR POSTED SPEED LIMITS 35 MPH OR LESS.
5. FOR BARRIER VEHICLE USE REQUIREMENTS SEE TABLES NY1-A AND NY2-A ON THE "LEGEND AND TABLES" DRAWING.
6. THE "NEXT X MILE" SUPPLEMENTAL SIGN (W7-3a) IS REQUIRED WHEN THE SHOULDER IS CLOSED FOR A DISTANCE GREATER THAN 2 MILES.
7. THE TEMPORARY CONCRETE BARRIER SHALL NOT BE PLACED ALONG THE SHOULDER TAPER. THE SHOULDER SHALL BE CLOSED USING CHANNELIZING DEVICES.
8. FOR SHOULDERS HAVING A WIDTH OF 8' OR GREATER, TRANSVERSE DEVICES ARE REQUIRED AT 800' INTERVALS PER 619 STANDARD SPECIFICATIONS. DEVICE LOCATIONS SHOWN IN DRAWING FOR ILLUSTRATIVE PURPOSES ONLY. FIRST SET TO BE INSTALLED 800' FROM DOWNSTREAM END OF SHOULDER TAPER. DEVICES THAT WOULD BE LOCATED WITHIN 700' OF BARRIER VEHICLE WILL NOT BE REQUIRED. 800' SPACING INTERVAL STARTS OVER DOWNSTREAM OF BARRIER VEHICLE.
9. SIGN ON LEFT SIDE OF ROADWAY REQUIRED ONLY FOR INTERMEDIATE OR LONG TERM CLOSURES.
10. A TAPERED END SECTION MAY BE USED IN LIEU OF A TEMPORARY IMPACT ATTENUATOR PROVIDED THE FIRST FULL HEIGHT SECTION OF TEMPORARY CONCRETE BARRIER IS AT LEAST 12' FROM THE NEAREST TRAVEL LANE. SHOULD THE CONTRACTOR ELECT TO EXTEND THE BARRIER BEYOND THE SHOULDER EDGE IN ORDER TO ACHIEVE THIS 12' OFFSET, ANY TEMPORARY GRADING AND/OR FILL REQUIRED BEYOND THE SHOULDER EDGE SHALL BE AT THE CONTRACTOR'S EXPENSE. CROSS SLOPES, LIMITS AND MATERIAL USED FOR ANY TEMPORARY GRADING AND/OR FILL SHALL BE APPROVED BY THE ENGINEER IN CONSULTATION WITH THE PROJECT DESIGNER PRIOR TO INSTALLATION OF THE BARRIER.



SHOULDER CLOSURE
SHORT, INTERMEDIATE OR LONG TERM STATIONARY
EXPRESSWAY / FREEWAY
NOT TO SCALE



SHOULDER CLOSURE
INTERMEDIATE OR LONG TERM STATIONARY WITH TEMPORARY CONCRETE BARRIER
EXPRESSWAY / FREEWAY
NOT TO SCALE

SEE "LEGEND AND TABLES" DRAWING FOR LEGEND OF SYMBOLS AND/OR LETTER CODES USED IN THIS DRAWING.

PREPARED BY: ON:	ALTERED BY: ON:

AS BUILT REVISIONS
DESCRIPTION OF WORK:

SIGNATURE DATE

COUNTY:

PIN

PS&E DATE

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

WORK ZONE TRAFFIC CONTROL

SHOULDER CLOSURE
EXPRESSWAY / FREEWAY
R3-22-8/10/09

CONTRACT NUMBER

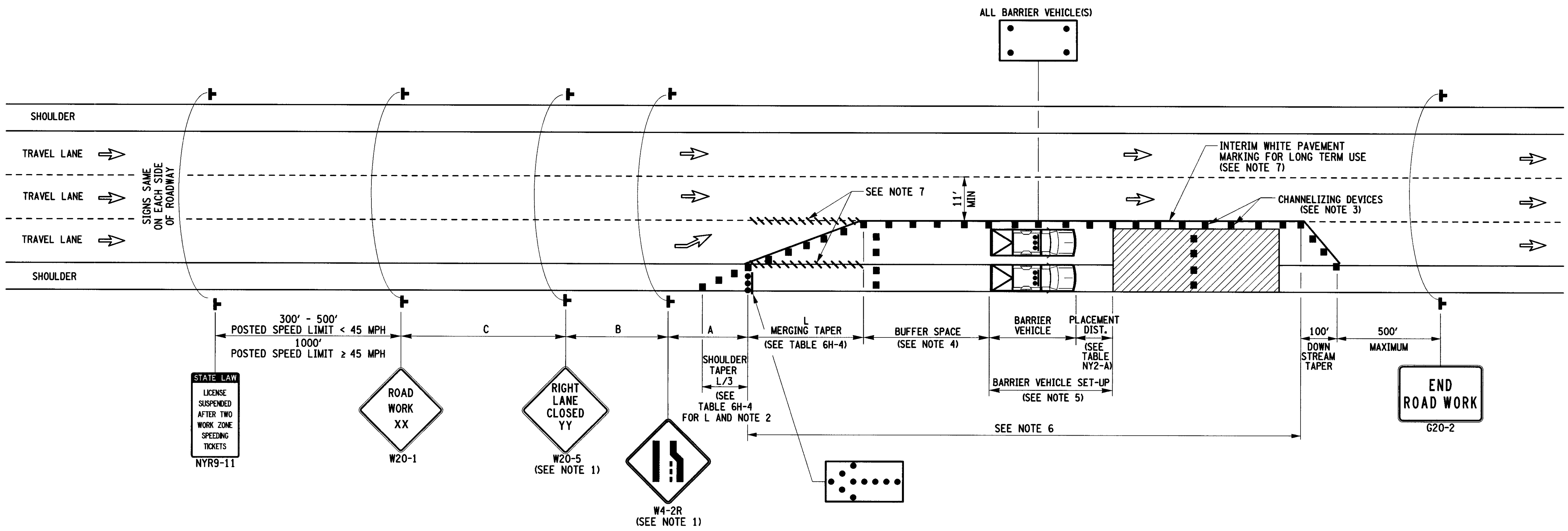
DRAWING NO. WZTC-
SHEET NO.

DOCUMENT NAME: USC_619-22_R3 MODIFIED STANDARD.DGN

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 03

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = USC_619-22_R3 MODIFIED STANDARD.DGN
DATE/TIME = 06-DEC-2010 11:17
USER = tspensier1



SINGLE LANE CLOSURE

SHORT, INTERMEDIATE OR LONG TERM STATIONARY
MULTI LANE HIGHWAY (DIVIDED) / EXPRESSWAY / FREEWAY

NOT TO SCALE

NOTES:

1. LEFT LANE CLOSURES ARE SYMMETRICAL TO RIGHT LANE CLOSURES. SUBSTITUTE LEFT LANE CLOSED 1/2 MILE SIGN (W20-5), THE CORRESPONDING LANE ENDS SIGN (W4-2L) AND, FOR LONG TERM CLOSURES, INTERIM YELLOW PAVEMENT MARKINGS.
2. WHEN PAVED SHOULDERS HAVING A WIDTH OF 8' OR MORE ARE CLOSED, CHANNELIZING DEVICES SHALL BE USED TO CLOSE THE SHOULDER IN ADVANCE TO DELINEATE THE BEGINNING OF THE WORK SPACE AND TO DIRECT VEHICULAR TRAFFIC TO REMAIN IN THE TRAVELED WAY.
3. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL BE 40' MAXIMUM FOR POSTED SPEED LIMITS 40 MPH OR GREATER, AND 20' MAXIMUM FOR POSTED SPEED LIMITS 35 MPH OR LESS.
4. NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME. FOR BUFFER SPACE LENGTH, SEE TABLE 6C-2 ON THE "LEGEND AND TABLES" DRAWING.
5. FOR BARRIER VEHICLE USE REQUIREMENTS SEE TABLES NY1-A AND NY2-A ON THE "LEGEND AND TABLES" DRAWING.
6. TRANSVERSE DEVICES ARE REQUIRED AT 800' INTERVALS PER 619 STANDARD SPECIFICATIONS. DEVICE LOCATIONS SHOWN IN DRAWING FOR ILLUSTRATIVE PURPOSES ONLY. FIRST SET TO BE INSTALLED 800' FROM DOWNSTREAM END OF SHOULDER TAPER. DEVICES THAT WOULD BE LOCATED WITHIN 700' OF BARRIER VEHICLE WILL NOT BE REQUIRED. 800' SPACING INTERVAL STARTS OVER DOWNSTREAM OF BARRIER VEHICLE. SHOULDERS HAVING A WIDTH OF 8' OR GREATER SHALL BE TREATED THE SAME AS A TRAVEL LANE. TRANSVERSE DEVICES NOT REQUIRED ON SHOULDERS LESS THAN 8' WIDE.
7. INTERIM PAVEMENT MARKINGS REQUIRED FOR LONG TERM CLOSURES ONLY. WHEN INTERIM MARKINGS ARE USED, ANY EXISTING PAVEMENT MARKINGS THAT ARE CONFLICTING OR MISLEADING SHALL BE REMOVED OR COVERED. THIS INCLUDES THE EXISTING LANE LINE DOWNSTREAM OF THE MERGING TAPER IF OFFSET FROM THE INTERIM MARKINGS.

SEE "LEGEND AND TABLES" DRAWING FOR LEGEND OF SYMBOLS AND/OR LETTER CODES USED IN THIS DRAWING.

PREPARED BY: ON:	ALTERED BY: ON:

AS BUILT REVISIONS DESCRIPTION OF WORK:		PIN	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
SIGNATURE / DATE	COUNTY:	PS&E DATE			WORK ZONE TRAFFIC CONTROL SINGLE LANE CLOSURE MULTI LANE DIVIDED HIGHWAY R3-31-5/26/10	DRAWING NO. WZTC- SHEET NO.

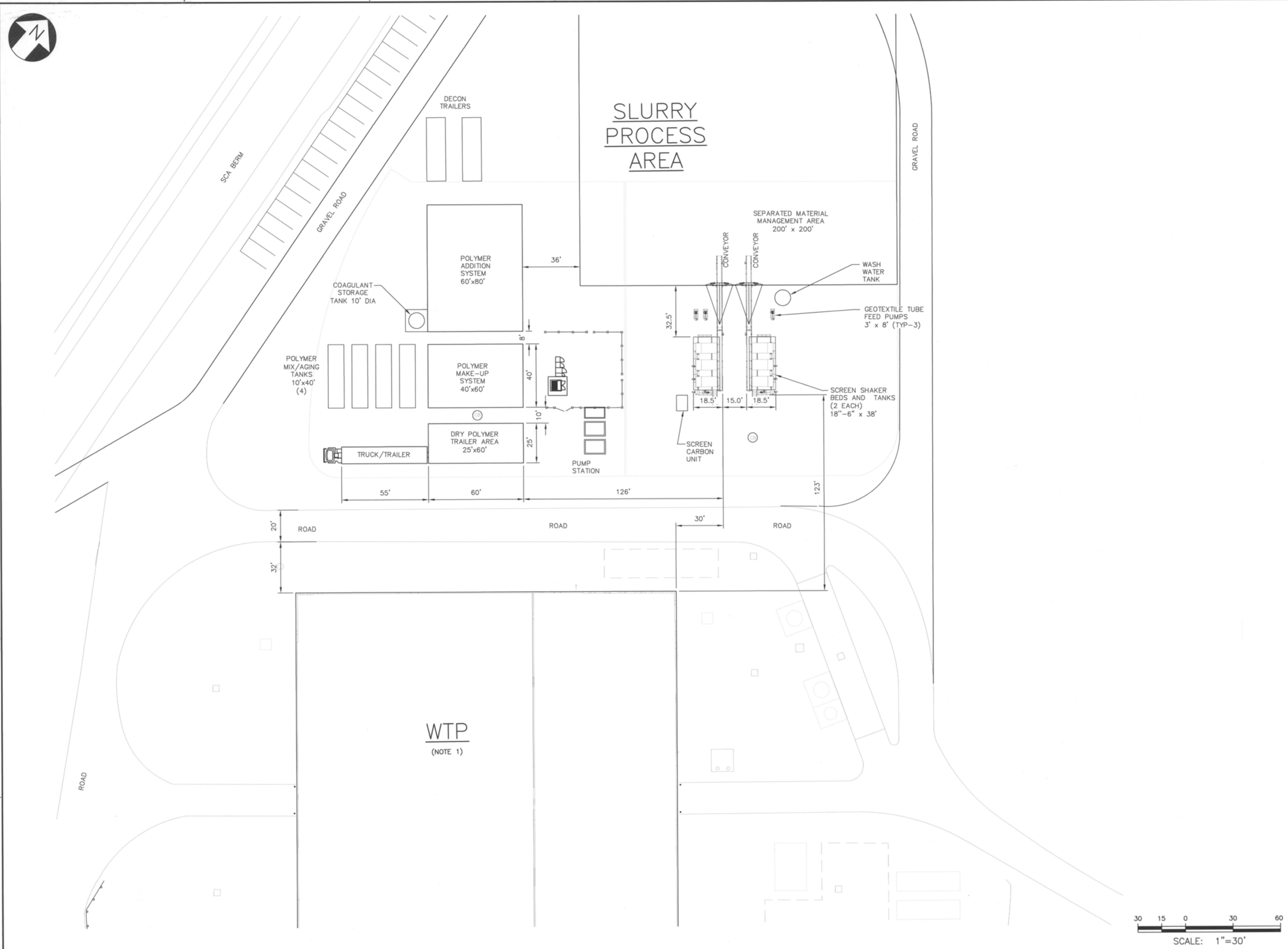
DOCUMENT NAME: USC_619-31_R3 MODIFIED STANDARD.DGN

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 03

CHECKED BY — DRAFTED BY — ESTIMATED BY — CHECKED BY — DESIGNED BY — JOB MANAGER — DESIGN SUPERVISOR

FILE NAME = USC_619-31_R3 MODIFIED STANDARD.DGN
DATE/TIME = 06-DEC-2010 11:17
USER = tspensieri

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL, IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



NOTES:

1. SEE SCA WATER TREATMENT PLANT (WTP) DESIGN DRAWINGS FOR WTP PLANS AND DETAILS.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JHG	TCD	DDS

DRAWN BY: JHG	DATE: 7/29/11	SEAL
CHECKED BY: XH	DATE: 7/29/11	
APPROVED BY: DDS	DATE: 7/29/11	
PROJECT MGR.: PEB	DATE: 7/29/11	

STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER No. 10076[?]

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

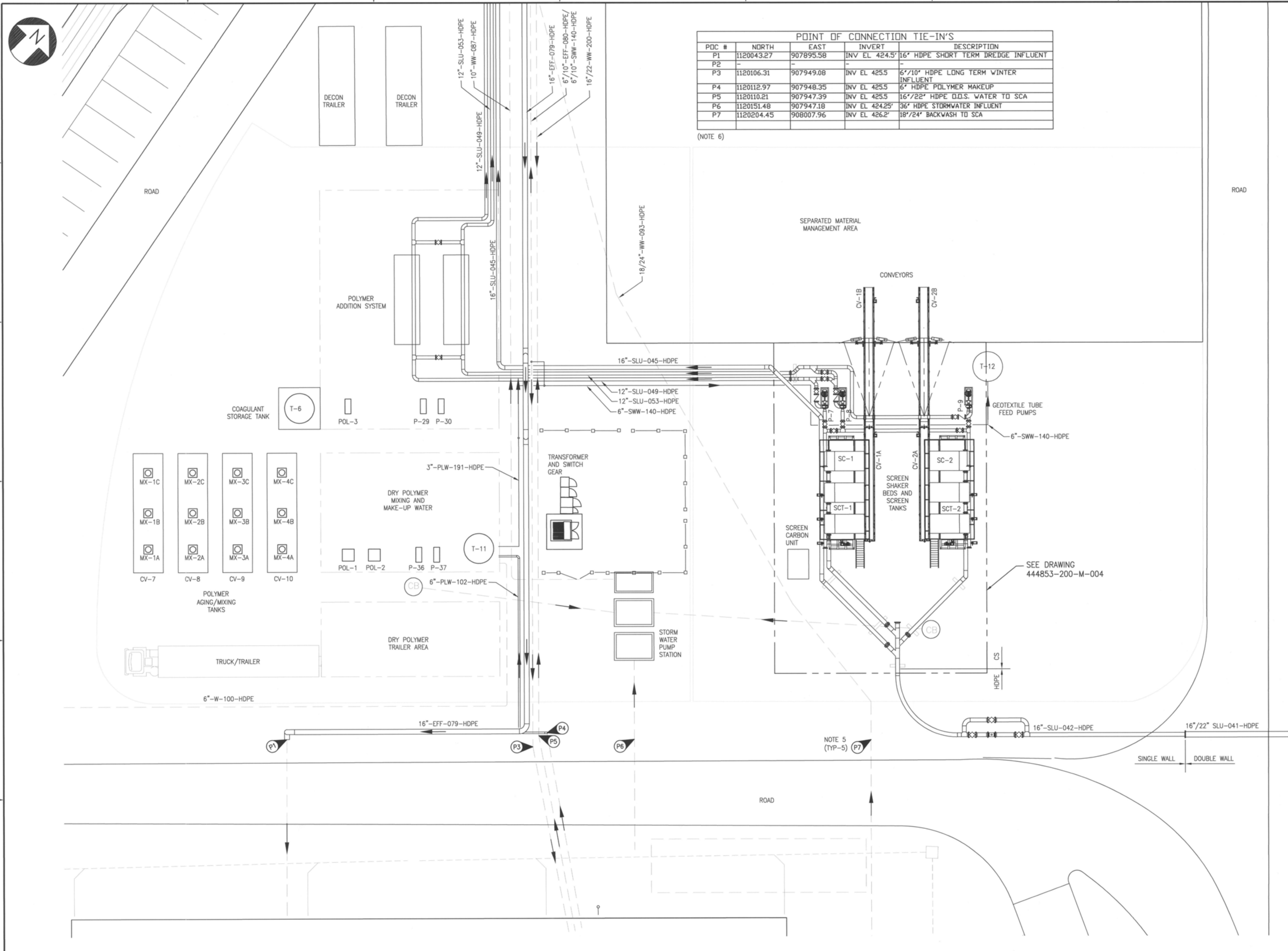
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PROCESS AREA PLAN

SCALE: SCALE 1"=30' (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-M-001 REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\MECH\444853-200-M-001.DWG
PLOT DATE: 8/26/2011 9:45 AM PLOTTED BY: SIVALIA, JACK



POINT OF CONNECTION TIE-IN'S				
POC #	NORTH	EAST	INVERT	DESCRIPTION
P1	1120043.27	907895.58	INV EL 424.5'	16" HDPE SHORT TERM DREDGE INFLUENT
P2	-	-	-	-
P3	1120106.31	907949.08	INV EL 425.5	6"/10" HDPE LONG TERM WINTER INFLUENT
P4	1120112.97	907948.35	INV EL 425.5	6" HDPE POLYMER MAKEUP
P5	1120110.21	907947.39	INV EL 425.5	16"/22" HDPE O.O.S. WATER TO SCA
P6	1120151.48	907947.18	INV EL 424.25'	36" HDPE STORMWATER INFLUENT
P7	1120204.45	908007.96	INV EL 426.2'	18"/24" BACKWASH TO SCA

(NOTE 6)

NOTES:

1. COORDINATE EQUIPMENT INSTALLATION LOCATIONS WITH PROCESS AREA EQUIPMENT LOCATION PLAN DRAWING 444853-200-M-001. EQUIPMENT LOCATIONS SHOULD BE FIELD ADJUSTED TO MATCH FINAL SITE CONDITIONS.
2. PIPE ROUTING SHOWN REFLECTS THE PRIMARY PIPELINES ONLY, SEE P&ID DRAWINGS INCLUDED WITH THIS DESIGN PACKAGE FOR ALL EQUIPMENT, PIPING AND INSTRUMENTATION COMPONENTS TO BE INSTALLED.
3. INSTALLATION LOCATIONS OF MAJOR EQUIPMENT AND FIELD ROUTING OF PIPING SHOULD FOLLOW THE GENERAL ARRANGEMENT SHOWN ON THIS DRAWING.
4. SEE CIVIL DRAWING 444853-200-C-302 FOR UNDERGROUND AND UTILITY SYSTEMS PIPING INSTALLATION.
5. POINT OF CONNECTION TIE-IN POINTS SHOW THE APPROXIMATE LOCATION FOR CONNECTIONS TO THE WATER TREATMENT PLANT (WTP) CONVEYANCE PIPING SYSTEMS, FIELD VERIFY ALL TIE-IN POINT LOCATIONS AFTER CONSTRUCTION OF THE WTP.
6. POINT OF CONNECTION TIE-IN TABLE SHOWS TIE-IN'S FOR ABOVEGROUND AND BELOWGROUND PIPELINES TO MATCH NUMBERING SEQUENCE SHOWN ON CIVIL PLANS.

16 8 0 16 32

SCALE: 1/16"=1'-0"

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

DRAWN BY: JTS	DATE: 7/29/11	SEAL
CHECKED BY: XH	DATE: 7/29/11	
APPROVED BY: DDS	DATE: 7/29/11	
PROJECT MGR.: PEB	DATE: 7/29/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

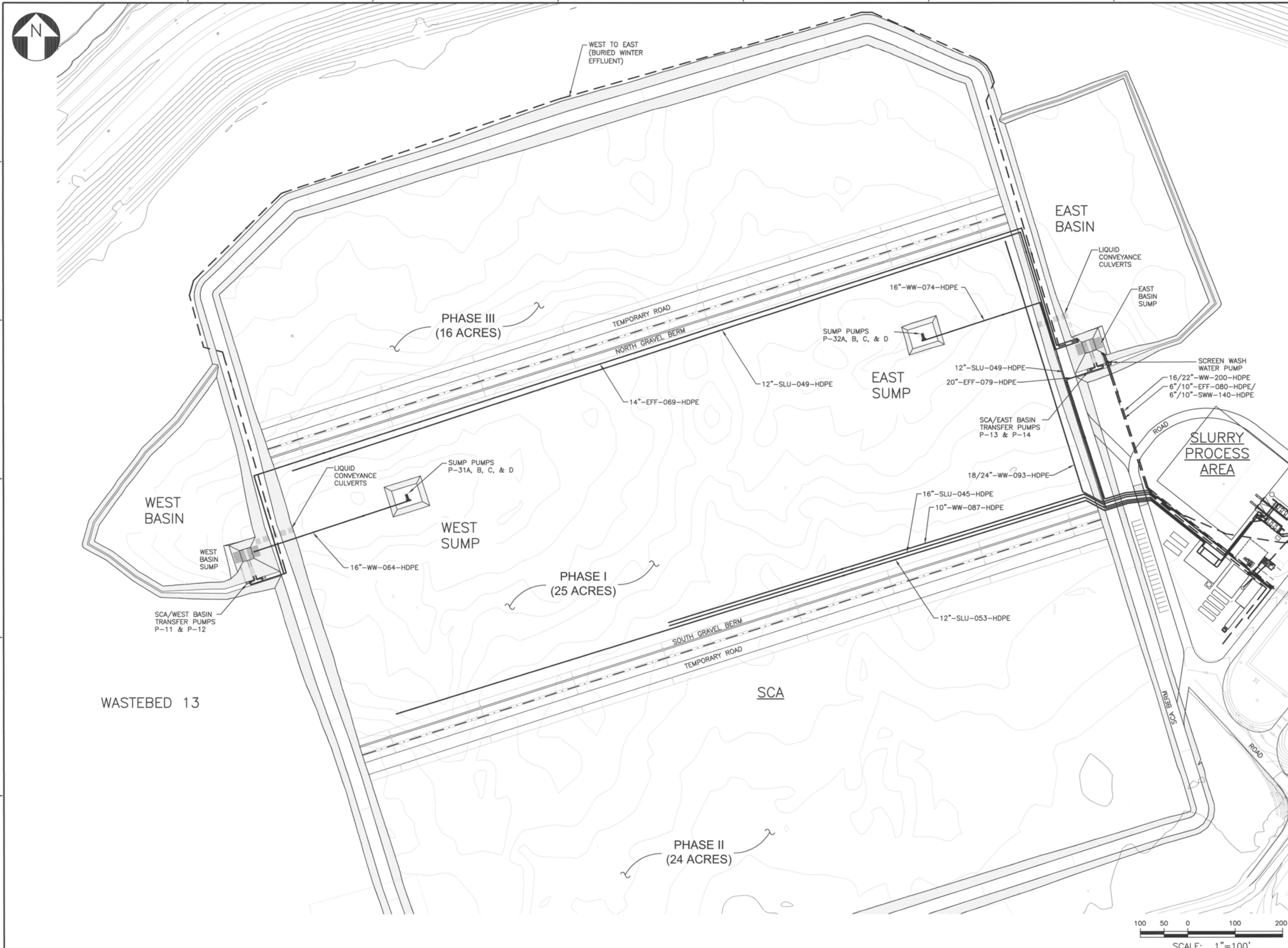
JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PROCESS AREA EQUIPMENT AND YARD PIPNG PLAN

SCALE: SCALE 1/16" =1'-0" (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-M-002 REV. 0



NOTES:

1. CONTOURS WITHIN THE SCA ARE THE BOTTOM OF PRIMARY LINER.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

DRAWN BY JTS	DATE 7/29/11	SEAL
CHECKED BY XH	DATE 7/29/11	
APPROVED BY DDS	DATE 7/29/11	
PROJECT MGR. PEB	DATE 7/29/11	

STATE OF NEW HAMPSHIRE RICHARD F. OTOSKI No. 10974 LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

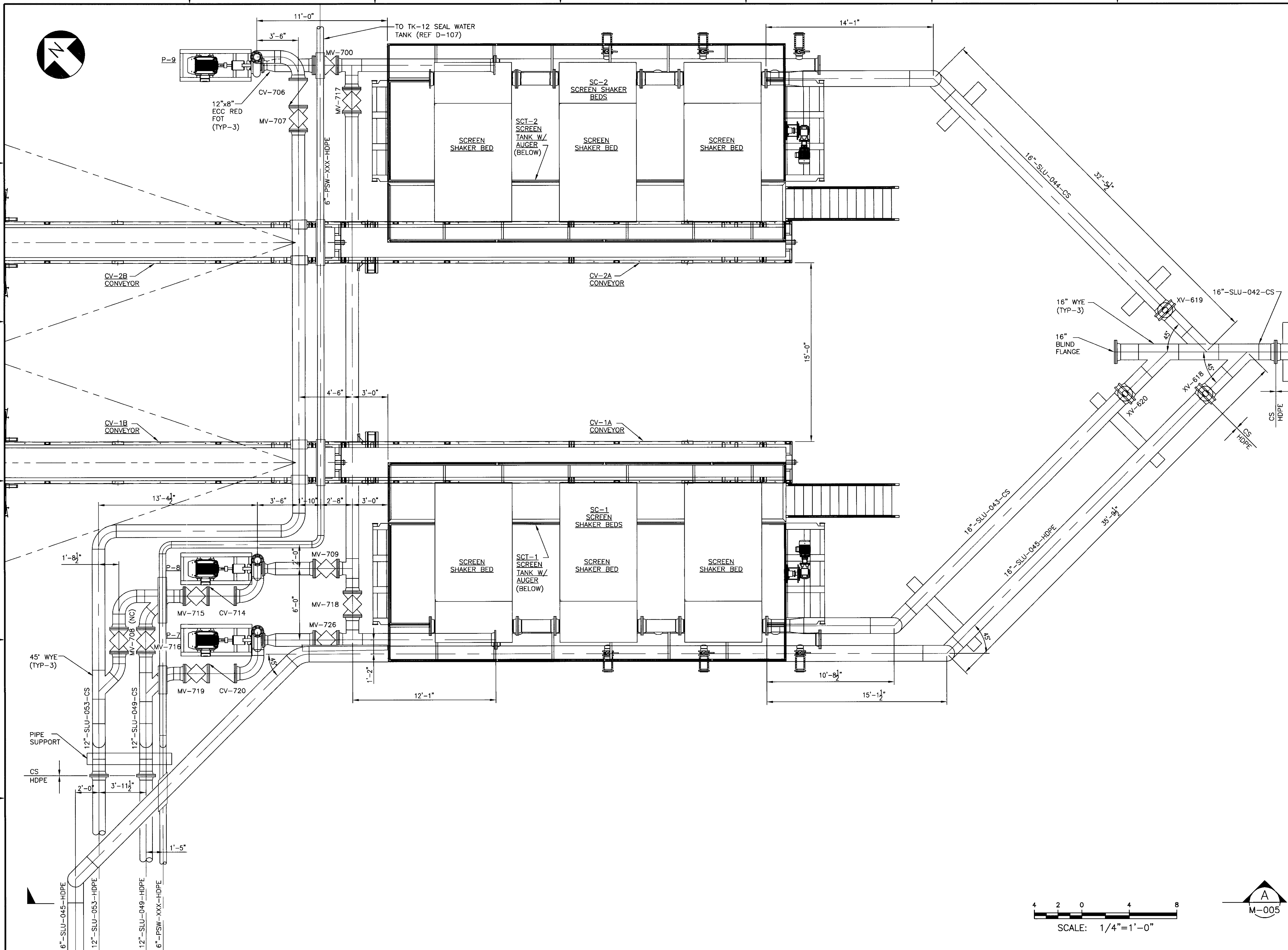
PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SCA EQUIPMENT AND PIPING PLAN PHASE 1

SCALE
SCALE 1"=100'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-M-003
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\MECH\444853-200-M-003.DWG
PLOT DATE: 8/26/2011 10:00 AM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE P&ID DRAWINGS FOR ALL INSTRUMENTATION AND PIPING COMPONENTS TO BE INSTALLED WITH ASSOCIATED SCREEN SHAKER BEDS AND SCREEN TANKS. FIELD ROUTE ALL SMALL BORE PIPING NOT SHOWN ON THIS PIPING ARRANGEMENT.
2. FINAL PIPE ARRANGEMENT SHALL BE FIELD ADJUSTED TO MATCH VENDOR SUPPLIED EQUIPMENT INLET AND OUTLET PIPING LOCATIONS AND PIPE SIZES.
3. PIPE SUPPORTS SHALL BE FIELD INSTALLED AND ADJUSTED TO MATCH FINAL PIPING CONFIGURATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

DRAWN BY: JTS	DATE: 7/29/11	SEAL
CHECKED BY: XH	DATE: 7/29/11	
APPROVED BY: MTO	DATE: 7/29/11	
PROJECT MGR.: PEB	DATE: 7/29/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

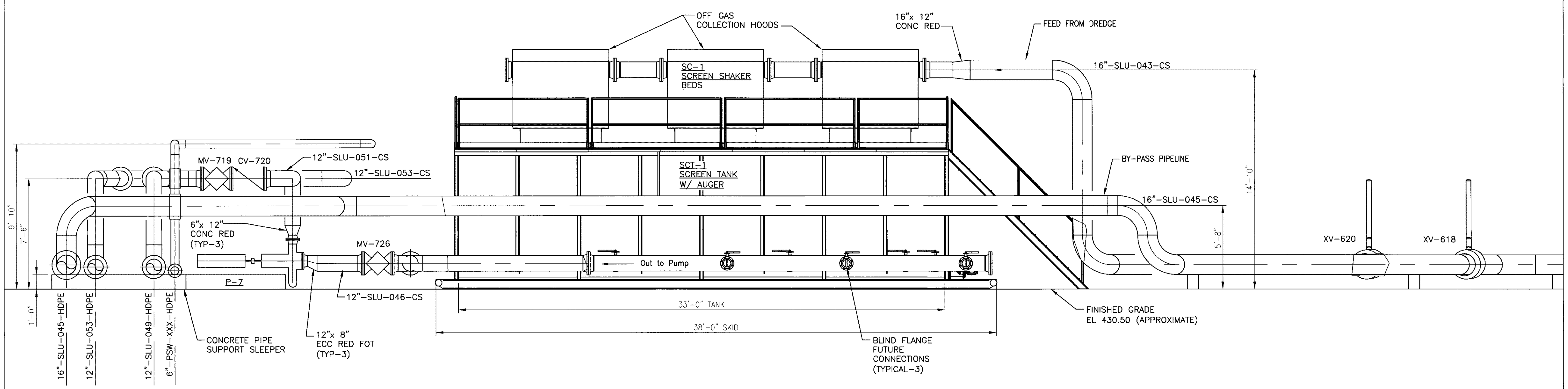
DRAWING TITLE:
SLURRY PROCESS AREA
PRIMARY SCREEN SHAKER BEDS
PIPING PLAN

SCALE: SCALE 1/4" =1'-0" (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-M-004 REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\MECH\444853-200-M-004.DWG
PLOT DATE: 8/23/2011 8:53 PM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



SECTION A M-004
SCALE: 1/4" = 1'-0"

SCALE: 1/4"=1'-0"

NOTES:

1. SEE P&ID DRAWINGS FOR ALL INSTRUMENTATION AND PIPING COMPONENTS TO BE INSTALLED WITH ASSOCIATED SCREEN SHAKER BEDS AND SCREEN TANKS. FIELD ROUTE ALL SMALL BORE PIPING NOT SHOWN ON THIS PIPING ARRANGEMENT.
2. FINAL PIPE ARRANGEMENT SHALL BE FIELD ADJUSTED TO MATCH VENDOR SUPPLIED EQUIPMENT INLET AND OUTLET PIPING LOCATIONS AND PIPE SIZES.
3. PIPE SUPPORTS SHALL BE FIELD INSTALLED AND ADJUSTED TO MATCH FINAL PIPING CONFIGURATION.
4. SCREEN WASH WATER NOT SHOWN.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY XH	7/29/11
APPROVED BY MTO	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW HAMPSHIRE RICHARD CITOSKY No.10874 LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB: 444853
WBS: 04620

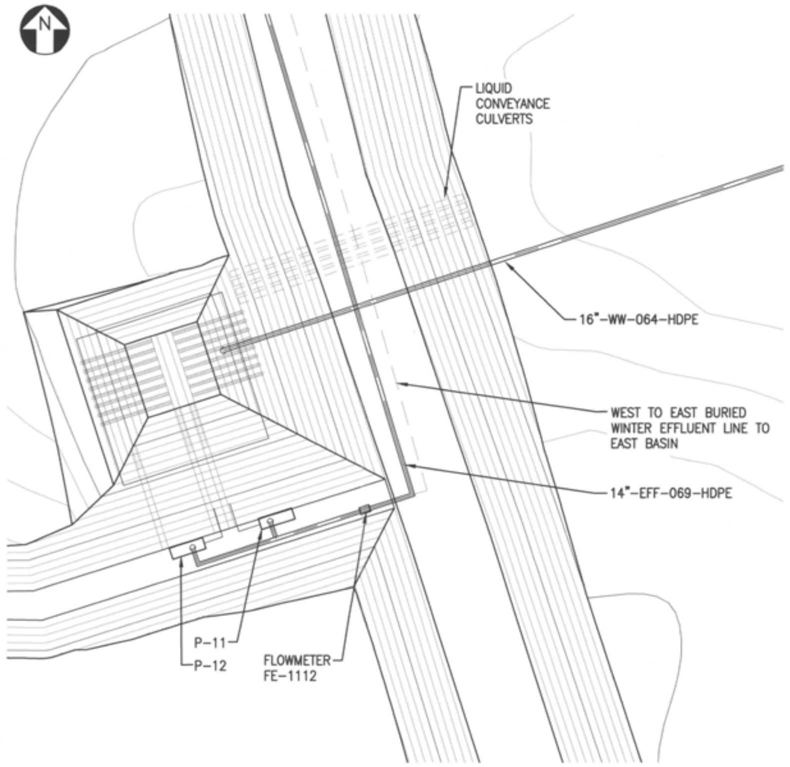
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY PROCESS AREA
SCREEN SHAKER BEDS
PIPING SECTION

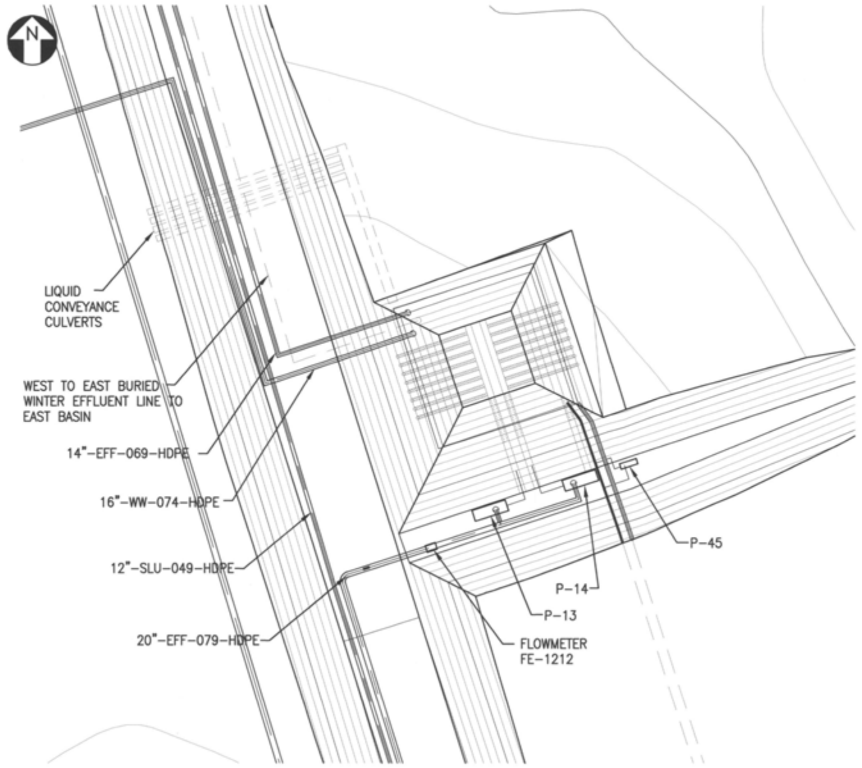
SCALE: SCALE 1/4" =1'-0" (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-M-005 REV. 0

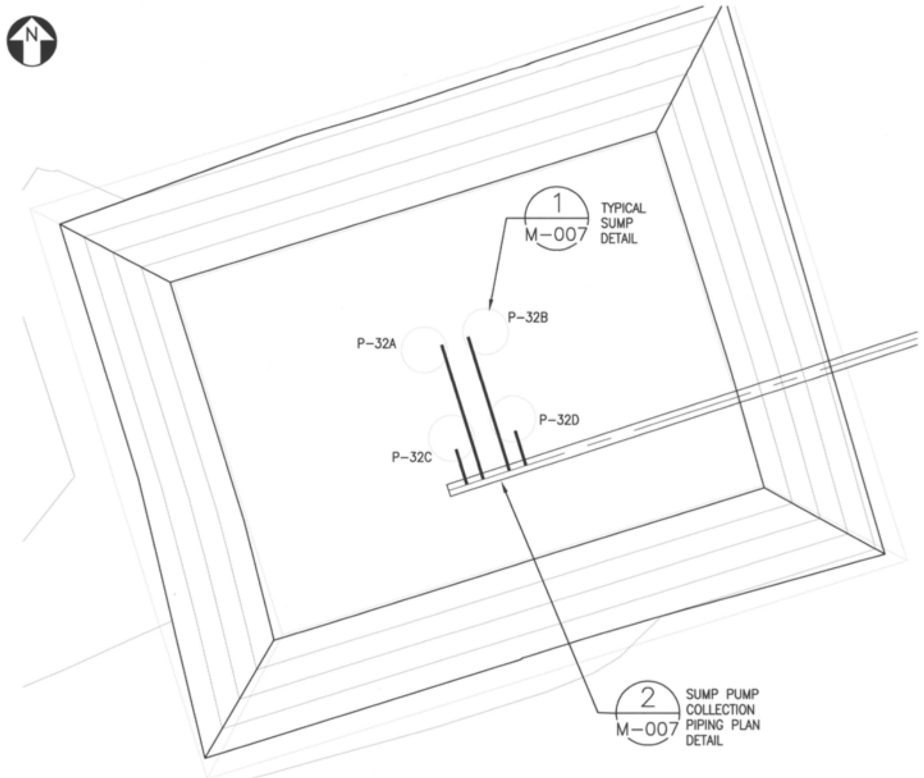
FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\MECH\444853-200-M-004.DWG
PLOT DATE: 8/23/2011 8:54 PM PLOTTED BY: SINALIA, JACK



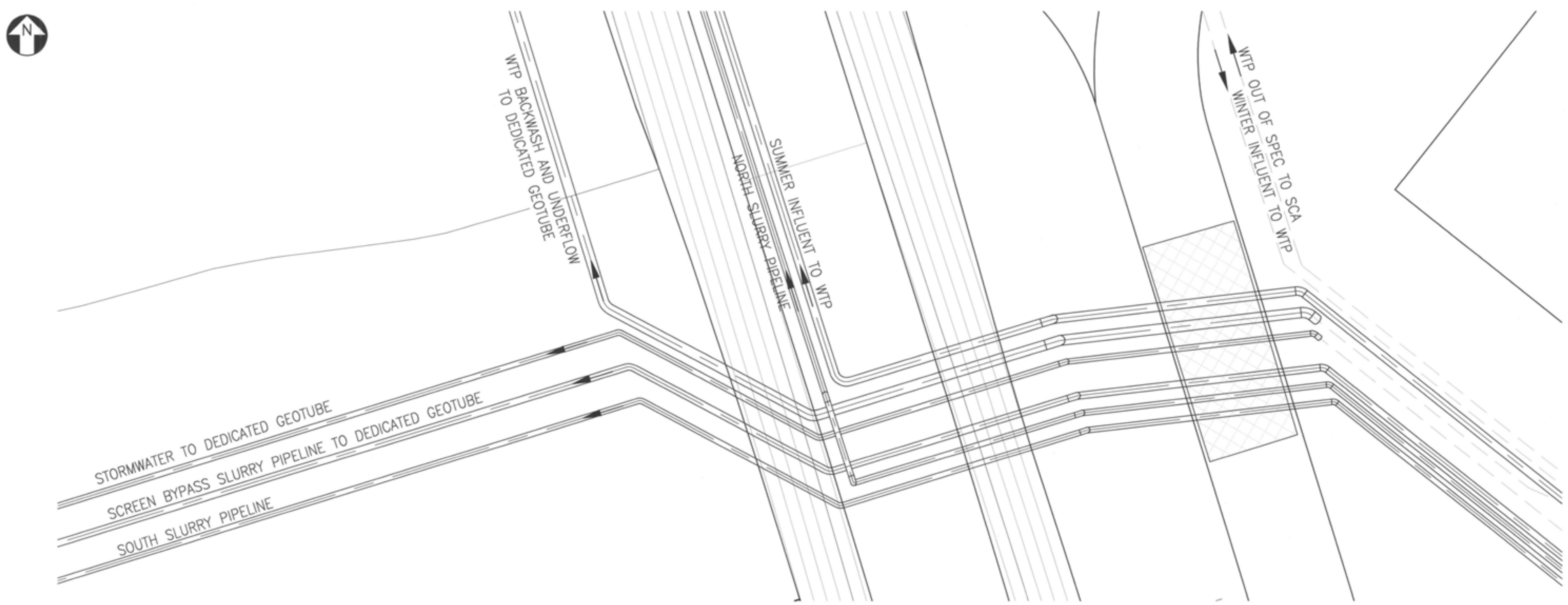
WEST BASIN PARTIAL PLAN
SCALE: 1/32" = 1'-0"



EAST BASIN PARTIAL PLAN
SCALE: 1/32" = 1'-0"



SCA EAST SUMP – PARTIAL PLAN
SCALE: 3/32" = 1'-0" (WEST SUMP ARRANGEMENT IS SIMILAR)



SCA BERM PIPE CROSSING PARTIAL PLAN

8 4 0 8 16
SCALE: 3/32"=1'-0"

16 8 0 16 32
SCALE: 1/16"=1'-0"

32 16 0 32 64
SCALE: 1/32"=1'-0"

NOTES:

1. SEE SEDIMENT CONSOLIDATION AREA BASIN DESIGN DRAWINGS FOR CULVERT DETAILS.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	DDS

	DATE
DRAWN BY JHG	7/29/11
CHECKED BY XH	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW HAMPSHIRE RICHARD OTOSKI No.10874 LICENSED PROFESSIONAL ENGINEER

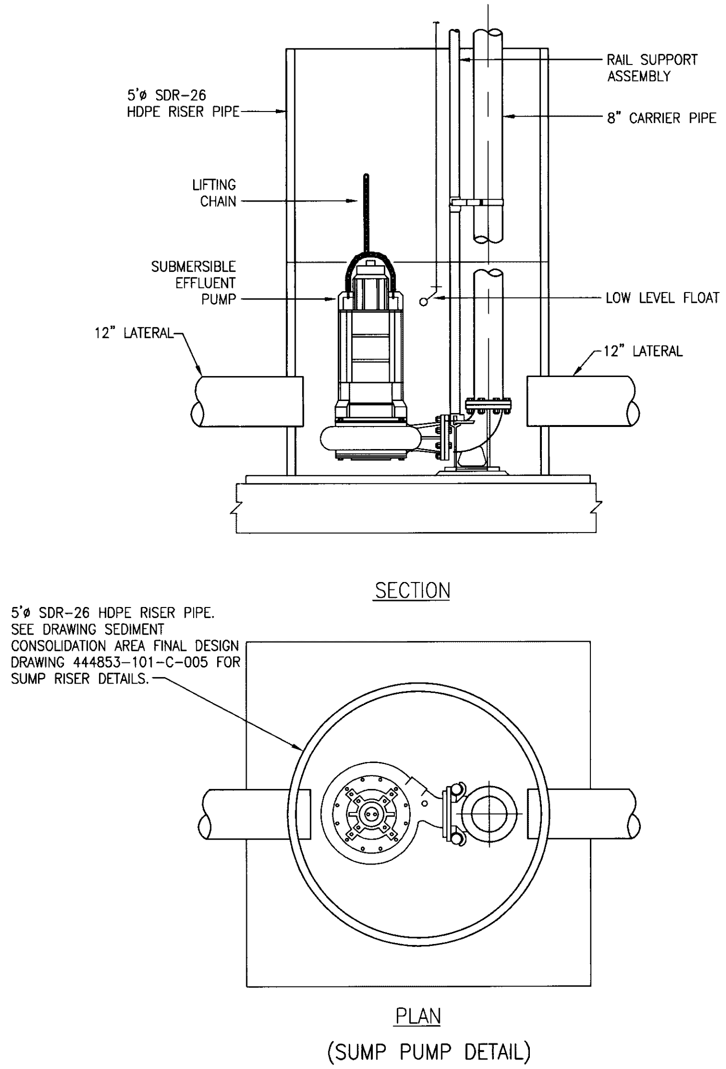
PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
SLURRY PROCESS AREA
SCA PIPING PARTIAL PLANS

SCALE: AS SHOWN (IF PRINTED ON 22x34 SHEET)
DRAWING NO. 444853-200-M-006
REV. 0



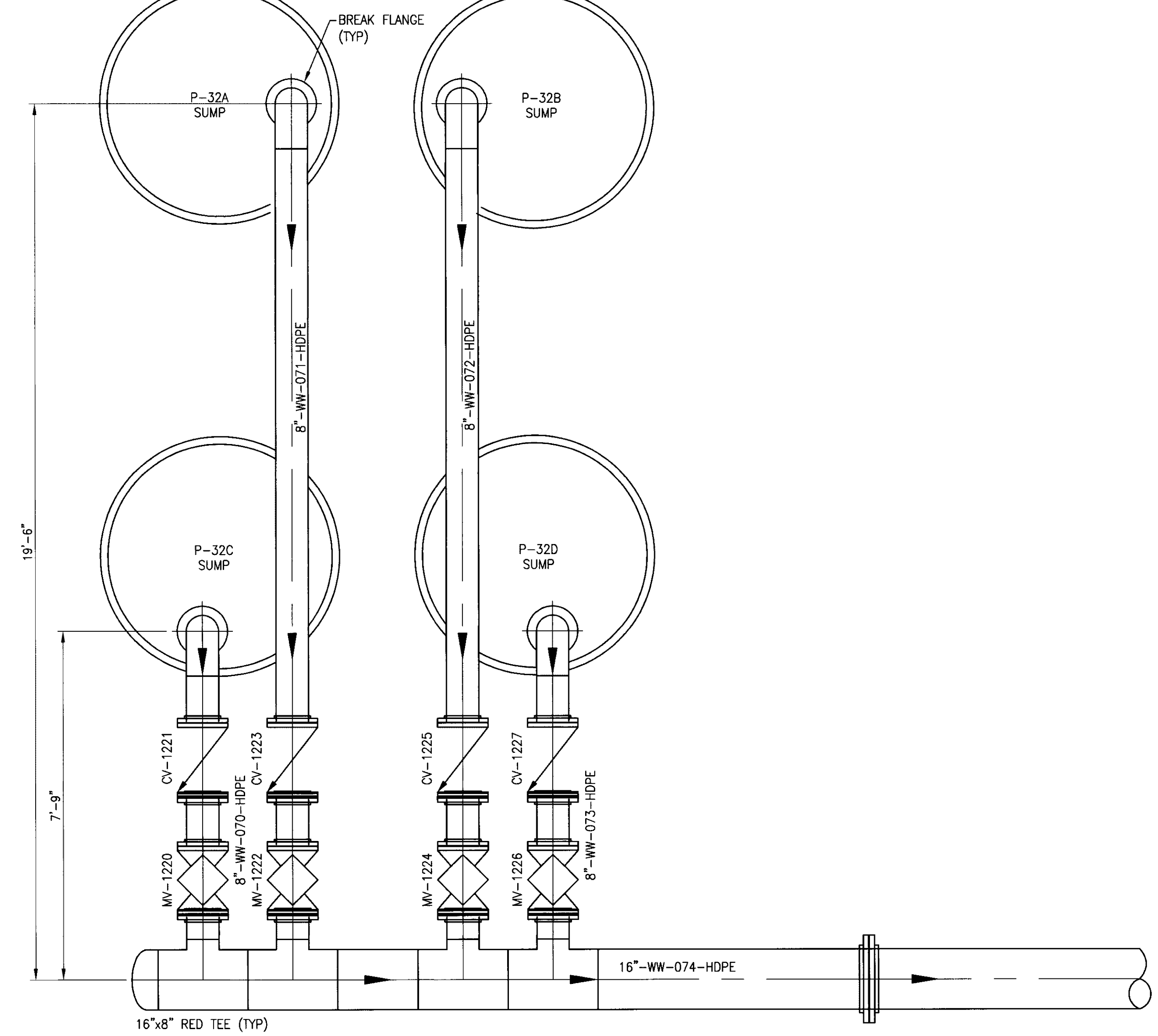
NOTES:

1. WHENEVER THE GUIDE PIPE LENGTHS EXCEED 13 FEET, AN OPTIONAL INTERMEDIATE GUIDE RAIL SUPPORT BRACKET SHOULD BE USED.

TYPICAL SCA TEMPORARY SUMP PUMP

DETAIL 1 / M-006

SCALE: 1/2" = 1'-0"



PIPING PLAN AT TOP OF RISERS

DETAIL 2 / M-006

SCALE: 1/2" = 1'-0"

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JHG	XH	DDS

	DATE
DRAWN BY JHG	7/29/11
CHECKED BY XH	7/29/11
APPROVED BY DDS	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW HAMPSHIRE – RICHARD F. OTOSKI No.10974 LICENSED – PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB: 444853

WBS: 04620

PROJECT TITLE:

Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:

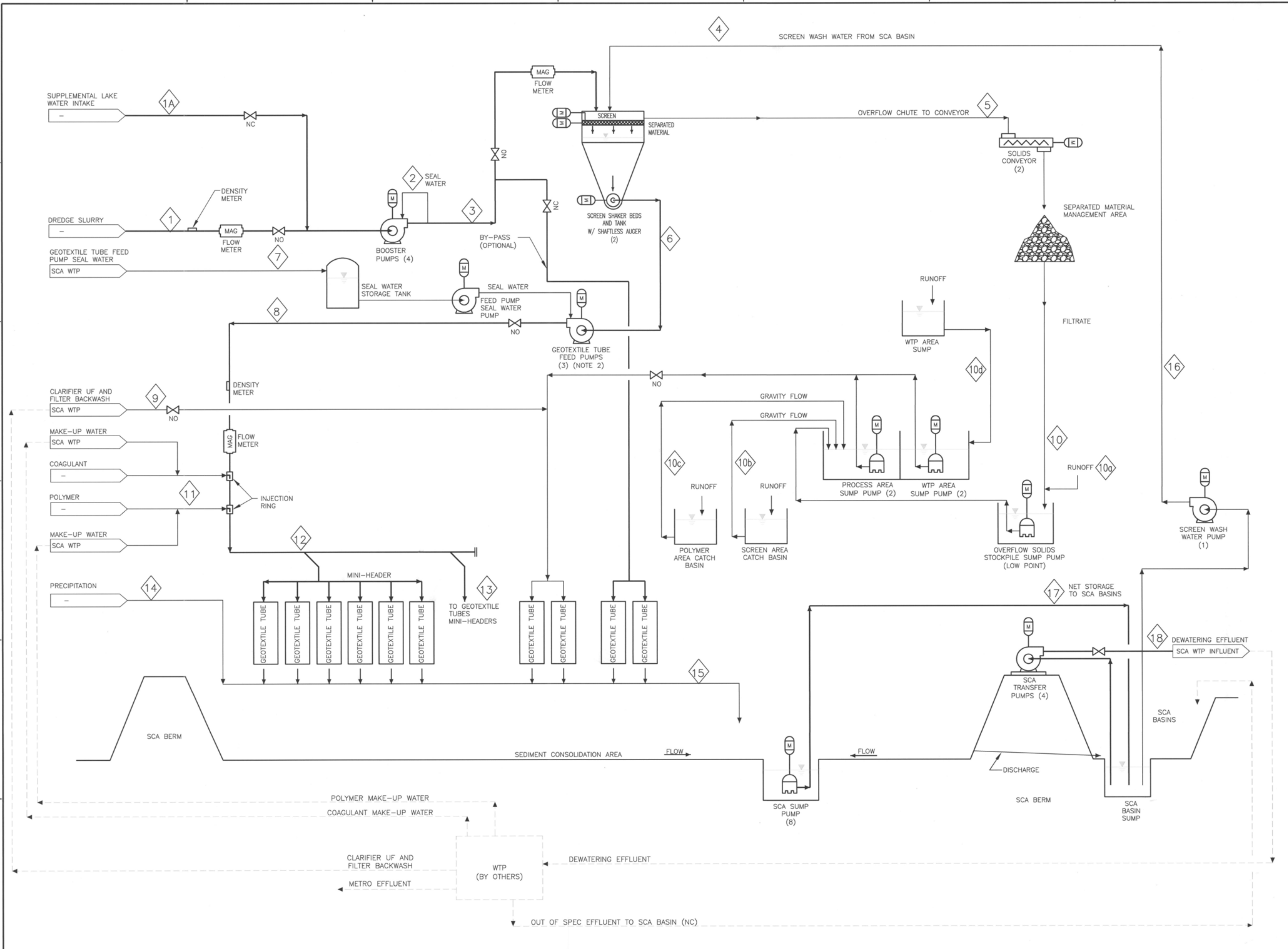
SCA PIPING SECTIONS AND DETALS

SCALE: AS SHOWN (IF PRINTED ON 22x34 SHEET)

DRAWING NO.: 444853-200-M-007

REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\MECH\444853-200-M-007.DWG
PLOT DATE: 7/28/2011 4:58 PM PLOTTED BY: GOLDTHWAIT, JAMES



NOTES:

1. SEE DRAWING 444853-200-D-002 FOR MASS BALANCE PROCESS FLOW DIAGRAM TABLES.
2. THREE PUMPS INSTALLED, TWO DUTY AND ONE BACKUP.
3. LAKE WATER PUMP IS ONLY USED TO CLEAR SLURRY PIPELINE IF/WHEN DREDGE PUMP IS INOPERABLE.
4. ALTERNATE SOURCE OF WATER FOR SCREEN RINSING WILL BE UTILIZED IF/WHEN THE REQUIRED FLOW IS NOT AVAILABLE FROM THE SCA BASIN (E.G. STARTUP).

LEGEND:

9 INDICATES MASS BALANCE STREAM NUMBER

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	TCD

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY XH	7/29/11
APPROVED BY TCD	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW YORK MARK T. OTTEN LICENSED PROFESSIONAL ENGINEER 061376 9/21/2011

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
MASS BALANCE PROCESS FLOW DIAGRAM

SCALE: NO SCALE

DRAWING NO. 444853-200-D-001 REV. 0

Remediation Area - A **Average Flow Scenario** **3,850 GPM**
Solids Content by Weight **11.7%**

Stream Numbe	1	1A	2	3	4	5	6	7	8	9	10	10a	10b	10c	10d	11	12	13	14	15	16	17	18
Description	Dredge Slurry	Supplemental Lake Water Intake	Booster Pumps Seal Water	Subtotal	Primary Screen Wash Water	Gravel-Sized Removed from Primary Screen	Subtotal	Geotextile Tube Feed Pumps Seal Water from WTP	Subtotal	Clarifier Underflow and Filter Backwash from WTP	Filtrate from Screened Material Stockpile	Runoff to Stockpile Sump (Sump#1)	Runoff to Screen Area Sump (Sump#2)	Runoff to Polymer/Dec on Area Sump (Sump#3)	Runoff to WTP Area Sump (Sump#4)	Coagulant, Polymer, and Makeup Water from WTP	Subtotal	Geotextile Tube Retention	Precipitation in SCA and Basins	Subtotal	Primary Screen Wash Water	Net Flow to SCA Basins	Dewatering Effluent to SCA WTP Influent
Total (gpm)	3,850	0	0	3,850	215	(0.9)	4,064	17	4,081	992	0.1	2.6	3.5	2.4	15.4	256	5,353	(669.5)	202	4,885	(215)	0.0	4,670
Solids (lbs/min) (Note 2)	4,056.7	0.0	0.0	4,056.7	0.0	(12.2)	4,044.6	0.0	4,044.6	9.6	0.0	0.0	0.0	0.0	0.0	11.4	4,065.6	(4057.7)	0.0	7.8	0.0	0.0	7.8

Remediation Area - C **Average Flow Scenario** **3,850 GPM**
Solids Content by Weight **9.9%**

Stream Number	1	1A	2	3	4	5	6	7	8	9	10	10a	10b	10c	10d	11	12	13	14	15	16	17	18
Description	Dredge Slurry	Supplemental Lake Water Intake	Booster Pumps Seal Water	Subtotal	Primary Screen Wash Water	Gravel-Sized Removed from Primary Screen	Subtotal	Geotextile Tube Feed Pumps Seal Water from WTP	Subtotal	Clarifier Underflow and Filter Backwash from WTP	Filtrate from Screened Material Stockpile	Runoff to Stockpile Sump (Sump#1)	Runoff to Screen Area Sump (Sump#2)	Runoff to Polymer/Dec on Area Sump (Sump#3)	Runoff to WTP Area Sump (Sump#4)	Polymer and Makeup Water from WTP	Subtotal	Geotextile Tube Retention	Precipitation in SCA and Basins	Subtotal	Primary Screen Wash Water	Net Flow to SCA Basins	Dewatering Effluent to SCA WTP Influent
Total (gpm)	3,850	0	0	3,850	215	(39.0)	4,026	17	4,042	992.4	6.3	2.6	3.5	2.4	15.4	87.9	5,153	(470.2)	202	4,884	(215)	0	4,670
Solids (lbs/min) (Note 2)	3,394.2	0.0	0.0	3,394.2	0.0	(529.5)	2,864.7	0.0	2,864.7	9.6	0.0106	0.0043	0.0058	0.0041	0.0257	1.5	2,875.9	(2,868.0)	0.0	7.8	0.0	0.0	7.8

Remediation Area - D **Average Flow Scenario** **3,850 GPM**
Solids Content by Weight **11.2%**

Stream Number	1	1A	2	3	4	5	6	7	8	9	10	10a	10b	10c	10d	11	12	13	14	15	16	17	18
Description	Dredge Slurry	Supplemental Lake Water Intake	Booster Pumps Seal Water	Subtotal	Primary Screen Wash Water	Gravel-Sized Removed from Primary Screen	Subtotal	Geotextile Tube Feed Pumps Seal Water from WTP	Subtotal	Clarifier Underflow and Filter Backwash from WTP	Filtrate from Screened Material Stockpile	Runoff to Stockpile Sump (Sump#1)	Runoff to Screen Area Sump (Sump#2)	Runoff to Polymer/Dec on Area Sump (Sump#3)	Runoff to WTP Area Sump (Sump#4)	Polymer and Makeup Water from WTP	Subtotal	Geotextile Tube Retention	Precipitation in SCA and Basins	Subtotal	Primary Screen Wash Water	Net Flow to SCA Basins	Dewatering Effluent to SCA WTP Influent
Total (gpm)	3,850	0	0	3,850	215	(1.5)	4,063	17	4,080	992.4	0.2	2.6	3.5	2.4	15.4	165.9	5,262	(644.8)	202	4,819	(215)	0	4,605
Solids (lbs/min) (Note 2)	3,859.3	0.0	0.0	3,859.3	0.0	(19.3)	3,840.0	0.0	3,840.0	9.6	0.0004	0.0043	0.0058	0.0041	0.0257	2.8	3,852.4	(3,844.7)	0.0	7.7	0.0	0.0	7.7

Remediation Area - E **Average Flow Scenario** **3,850 GPM**
Solids Content by Weight **14.9%**

Stream Number	1	1A	2	3	4	5	6	7	8	9	10	10a	10b	10c	10d	11	12	13	14	15	16	17	18
Description	Dredge Slurry	Supplemental Lake Water Intake	Booster Pumps Seal Water	Subtotal	Primary Screen Wash Water	Gravel-Sized Removed from Primary Screen	Subtotal	Geotextile Tube Feed Pumps Seal Water from WTP	Subtotal	Clarifier Underflow and Filter Backwash from WTP	Filtrate from Screened Material Stockpile	Runoff to Stockpile Sump (Sump#1)	Runoff to Screen Area Sump (Sump#2)	Runoff to Polymer/Dec on Area Sump (Sump#3)	Runoff to WTP Area Sump (Sump#4)	Coagulant, Polymer, and Makeup Water from WTP	Subtotal	Geotextile Tube Retention	Precipitation in SCA and Basins	Subtotal	Primary Screen Wash Water	Net Flow to SCA Basins	Dewatering Effluent to SCA WTP Influent
Total (gpm)	3,850	0	0	3,850	215	(1.6)	4,063	17	4,080	992	0.3	2.6	3.5	2.4	15.4	188	5,284	(875.7)	202	4,610	(215)	0.0	4,395
Solids (lbs/min) (Note 2)	5,268.0	0.0	0.0	5,268.0	0.0	(21.1)	5,247.0	0.0	5,247.0	9.6	0.0	0.0	0.0	0.0	0.0	8.3	5,265.0	(5257.6)	0.0	7.4	0.0	0.0	7.4

NOTES:

1. SEE DRAWING 444853-200-D-001 FOR MASS BALANCE PROCESS FLOW DIAGRAM.
2. THEORETICAL DRY WEIGHT BASIS.
3. NUMBERS WITHIN PARENTHESIS REPRESENT DIVERTED FLOWS.
4. THESE TABLES REPRESENT THE AVERAGE FLOW SCENARIOS FOR EACH REMEDIATION AREA. SEE APPENDIX E TABLES FOR MAXIMUM FLOW SCENARIOS.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APP'VD
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	XH	TCD

DRAWN BY: JTS	DATE: 7/29/11	SEAL: STATE OF NEW YORK, MARK T. OTTEN, 061876, LICENSED PROFESSIONAL ENGINEER, 7/29/2011
CHECKED BY: XH	DATE: 7/29/11	
APPROVED BY: TCD	DATE: 7/29/11	
PROJECT MGR.: PEB	DATE: 7/29/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
MASS BALANCE PROCESS FLOW DIAGRAM TABLES

SCALE: NO SCALE

DRAWING NO.: 444853-200-D-002
REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\PFD\444853-200-D-002.DWG
PLOT DATE: 7/28/2011 4:49 PM PLOTTED BY: SIVALIA, JACK

GENERAL INSTRUMENT SYMBOLS

SINGLE FUNCTION — MULTIPLE FUNCTION

- OR — FIELD MOUNTED INSTRUMENT OR DEVICE
- OR — FRONT OF PANEL-MOUNTED INSTRUMENT ON LOCAL PANEL
- OR — FRONT OF PANEL-MOUNTED INSTRUMENT ON MAIN PANEL
- OR — REAR OF PANEL-MOUNTED INSTRUMENT ON LOCAL PANEL
- OR — REAR OF PANEL-MOUNTED INSTRUMENT ON MAIN PANEL
- OR — SOFTWARE-GENERATED ANALOG FUNCTION (OPERATOR ACCESSIBLE)
- OR — SOFTWARE-GENERATED ANALOG FUNCTION (NOT OPERATOR ACCESSIBLE)
- OR — SOFTWARE-GENERATED DIGITAL FUNCTION (OPERATOR ACCESSIBLE)
- OR — SOFTWARE GENERATED DIGITAL FUNCTION (NOT OPERATOR ACCESSIBLE)
- PLC / CP-1 — PLC INPUT/OUTPUT, LOCATED IN LOCAL CONTROL PANEL (CP-1)

I / XX — CONTROL INTERLOCK REFER TO DRAWING 444853-200-D-114 FOR DESCRIPTIONS

P — PURGE SYSTEM, SEE SPECIFICATIONS

XXX / XXX / XX

- FIRST LETTER(S)
- SUCCEEDING LETTERS
- CODES AND ABBREVIATIONS
- ITEM DESIGNATOR USED WHEN THERE ARE IDENTICAL COMPONENTS WITH THE SAME P&ID SHEET & LOOP NUMBER
- LOOP NUMBER PER P&ID SHEET
- P&ID SHEET IDENTIFIER

FUNCTION IDENTIFICATION LETTERS

LETTER	FIRST LETTER: MEASURED OR INITIATING VARIABLE	FIRST LETTER: MODIFIER	SUCCEEDING LETTERS: READOUT OR PASSIVE FUNCTION	SUCCEEDING LETTERS: OUTPUT FUNCTION	SUCCEEDING LETTERS: MODIFIER
A	ANALYSIS		ALARM		
B	BURNER		PROGRAMMER		
C	CONDUCTIVITY (ELECTRICAL)			CONTROL	
D	DENSITY (MASS) OR SPECIFIC GRAVITY	DIFFERENTIAL			
E	VOLTAGE (EMF)		PRIMARY ELEMENT		
F	FLOW RATE	RATIO (FRACTION)			FILTER
G	GAUGE		GLASS (VIEWING)		
H	HAND				HIGH (OPEN)
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT (PILOT)		LOW (CLOSED)
M	MOTOR				MIDDLE OR INTERMEDIATE
N					
O	OPERATION	OFFSET	ORIFICE (RESTRICTION)		
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY, EVENT	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD, PRINT		
S	SPEED, FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION (MECHANICAL ANALYSIS)			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE, TORQUE		WELL		
X	UNCLASSIFIED	X (AXIS)	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE OR PRESENCE	Y (AXIS)		RELAY, COMPUTE, CONVERT	
Z	POSITION, DIMENSION	Z (AXIS)		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

PROCESS SYMBOLS

VALVES

- 3-WAY VALVE
- 4-WAY VALVE
- AIR RELIEF VALVE
- ANGLE VALVE (HAND OPERATED)
- B — BACK FLOW PREVENTER — D
- BACK PRESSURE REGULATING VALVE (SELF CONTAINED)
- BALL VALVE
- BUTTERFLY VALVE
- CHECK VALVE (ARROW FLOW DIRECTION)
- BALL CHECK VALVE (ARROW FLOW DIRECTION)
- CONTROL VALVE
- DIAPHRAGM VALVE
- FLOAT CONTROL VALVE
- GATE VALVE
- GLOBE VALVE
- KNIFE GATE VALVE
- NEEDLE VALVE
- PLUG VALVE
- PNEUMATIC ACTUATED BALL VALVE
- PNEUMATIC DIAPHRAGM CONTROL VALVE
- PRESSURE REGULATING VALVE (SELF CONTAINED)
- QUICK OPENING VALVE
- RELIEF VALVE (PRESSURE OR VACUUM)
- S — SOLENOID CONTROL VALVE
- S — SOLENOID CONTROL VALVE (3- WAY)
- T — THERMOSTATIC AIR VENT VALVE

PUMPS

- POSITIVE CENTRIFUGAL PUMP OR BLOWER
- POLYBLEND PUMP
- POSITIVE DISPLACEMENT PUMP OR BLOWER
- AIR ACTUATED DIAPHRAGM PUMP
- CHEMICAL PUMP
- GEAR PUMP
- SCREW PUMP
- OR M — SUBMERSIBLE PUMP

MIXERS AND MOTORS

- MX — MIXER/AGITATOR
- M — PROPELLER AERATOR
- M — MOTOR

FLOW AND LEVEL ELEMENTS

- FLOW METER
- ORIFICE METER
- FI — ROTOMETER
- SIGHT GLASS
- MAG — MAGNETIC FLOW METER
- TURBIDITY METER
- VENTURI TUBE
- VTX — VORTEX FLOW METER
- ALARM BEACON (LIGHT)
- ALARM HORN
- VFD — VARIABLE FREQUENCY DRIVE

MISCELLANEOUS MECHANICAL ITEMS

- CALIBRATION CHAMBER
- CAMLOC FITTING (HOSE CONNECTION)
- CHEMICAL DIAPHRAGM SEAL
- DIAPHRAGM CHECK VALVE (FLOW DIRECTION SHOWN)
- BASKET FILTER
- END CAP
- PRESSURE / VACUUM — RUPTURE DISC
- CONCENTRIC / ECCENTRIC — REDUCER (RDCR)
- DESCRIP VLV# — DRAIN or SAMPLE (D= DRAIN) (S= SAMPLE)
- FLAME ARRESTOR
- PULSATION DAMPENER
- LOCAL / REMOTE — SAMPLE TAP
- PLUGGED
- UNION
- "Y" TYPE STRAINER (FLOW DIRECTION SHOWN)
- POLYMER INJECTION RING

ABBREVIATIONS AND CODES

*	SUPPLIED WITH ELECTRICAL OR MECHANICAL EQUIPMENT
A/M	AUTO/MANUAL
C/L	COMPUTER/LOCAL
D/S	DUTY/STANDBY
E/S	EMERGENCY/STOP
F/S	FAST/SLOW
FOR	FORWARD/OFF/REVERSE
FOS	FAST/OFF/SLOW
FSOA	FAST/SLOW/OFF/AUTO
HOA	HAND/OFF/AUTO
HOR	HAND/OFF/REMOTE
LAR	LOWER/AUTO/RAISE
L/LLO	LEAD/LAG LOCK OUT
SL/R	STOP LOWER/RAISE
MOA	MANUAL/OFF/AUTO
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OAC	OPEN/AUTO/CLOSE
O/C	OPEN/CLOSE
O/O	ON/OFF
OOA	ON/OFF/AUTO
OOR	ON/OFF/REMOTE
ORC	OPEN/REMOTE/CLOSE
OIT	OPERATOR INTERFACE TERMINAL
PAR	PARSONS
PB	PUSH BUTTON
SD	SHUTDOWN
SEL	SELECTOR
S/F	SLOWER/FASTER
S/S	START/STOP
SCA	SEDIMENT CONSOLIDATION AREA

LINE CODES

- PROCESS OR MECHANICAL LINE
- MINOR PROCESS LINE OR MECHANICAL
- CONNECTION SIGNAL LINE (ELECTRICAL, DIGITAL OR ANALOG)
- NO ELECTRICAL CONNECTION
- ELECTRICAL CONNECTIONS (INDICATED BY DOTS)
- HEAT TRACED
- TELEPHONE LINE
- SOFTWARE OR DATA
- PNEUMATIC LINE
- HYDRAULIC LINE
- CAPILLARY
- DATA HIGHWAY COMMUNICATIONS
- LINK FLEXIBLE TUBING
- FLEXIBLE HOSE
- FLOW DIRECTION
- PIPE INSULATION
- TO/FROM XXXX — PROCESS LINE OR ELECTRICAL SIGNAL CONTINUATION TO/FROM
- SHT # — SHEET NUMBER INDICATED

SPECIALTY ITEM IDENTIFICATION

SP / 001 — SPECALTY ITEM

LINE DESIGNATION

PROCESS LINE — XX"-XX-XXX-XXX

- LINE SIZE
- SYSTEM CODE
- SEQUENCE NUMBER
- MATERIAL CODE

SYSTEM CODE

BWW	BACK WASHWATER
CHEM	CHEMICAL
CNDS	CONDENSATE
DR	DRAIN
EFF	EFFLUENT
HPSW	HP SEALWATER
INF	INFLUENT
OG	OFF GAS
O/F	OVERFLOW
PLW	PLANT WATER(REUSE)
POL	POLYMER
PRCS	PROCESS
PSW	PUMP SEAL WATER
PW	PROCESS WATER
RTN	RETURN
SLU	SLURRY
SWW	SCREEN WASH WATER
SPLY	SUPPLY
ST	STEAM
U/F	UNDERFLOW
V	VENT
W	WATER (POTABLE)
WW	WASTE WATER

EQUIPMENT NOTATION

AZ	AUTOMATIC SAMPLER
B	BLOWER (AIR)
BFP	BELT FILTER PRESS
BS	BAR SCREEN
C	COMPRESSOR
CP-X	CONTROL PANEL No 'X'
DCH	DREDGE CUTTER HEAD
DP	DREDGE PUMP
E	HEAT EXCHANGER EQUIP.
EQB	EQUALIZATION BASIN
F	FAN
FP-XXX	FIELD PANEL No 'XXX'
HC	HYDROCYCLONE
M	MOTOR
MCC	MOTOR CONTROL CENTER
MX	MIXER MOTOR
N	CENTRIFUGE
OWS	OIL WATER SEPARATOR
P	PUMP
S	SUMP
SC	SCREEN
SCT	SCREEN TANK WITH AUGER
T	TANK

MATERIAL CODES

BI	BLACK IRON
CS	CARBON STEEL
CU	COPPER
DI	DUCTILE IRON
FRP	FIBER REINFORCED PLASTICS
GALV	GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
PVC	POLYVINYL CHLORIDE
SS	STAINLESS STEEL
STL	STEEL

DRAWING INDEX

GENERAL NOTES:

1. THE SYMBOLS AND LEGEND SHOWN ARE BASED ON ISA STANDARD, ANSI/ISA-S5.1-1984 R1992) "INSTRUMENTATION SYMBOLS AND IDENTIFICATION" AND STANDARD ISA-S5. 3-1983 "GRAPHIC SYMBOLS FOR DISTRIBUTED CONTROL/SHARED DISPLAY INSTRUMENTATION, LOGIC AND COMPUTER SYSTEMS.
2. ALL INSTRUMENT PROCESS CONNECTION (IMPULSE) LINES ARE UNDERSTOOD TO HAVE SINGLE PIPING CLASS ROOT VALVES. ROOT VALVES ARE SHOWN ON APPROPRIATE INSTALLATION DETAIL DRAWING BUT NOT ON P&ID.
3. NORMAL OPERATION MEANS PLANT EQUIPMENT IS IN OPERATING MODE FOR A CONTINUOUS OR BATCH PROCESS.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPR'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	DATE 7/29/11
CHECKED BY	DDS	DATE 7/29/11
APPROVED BY	TCD	DATE 7/29/11
PROJECT MGR.	PEB	DATE 7/29/11

SEAL: STATE OF NEW YORK — MARK T. OTT… — 061376 — LICENSED PROFESSIONAL ENGINEER — 7/27/2011

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

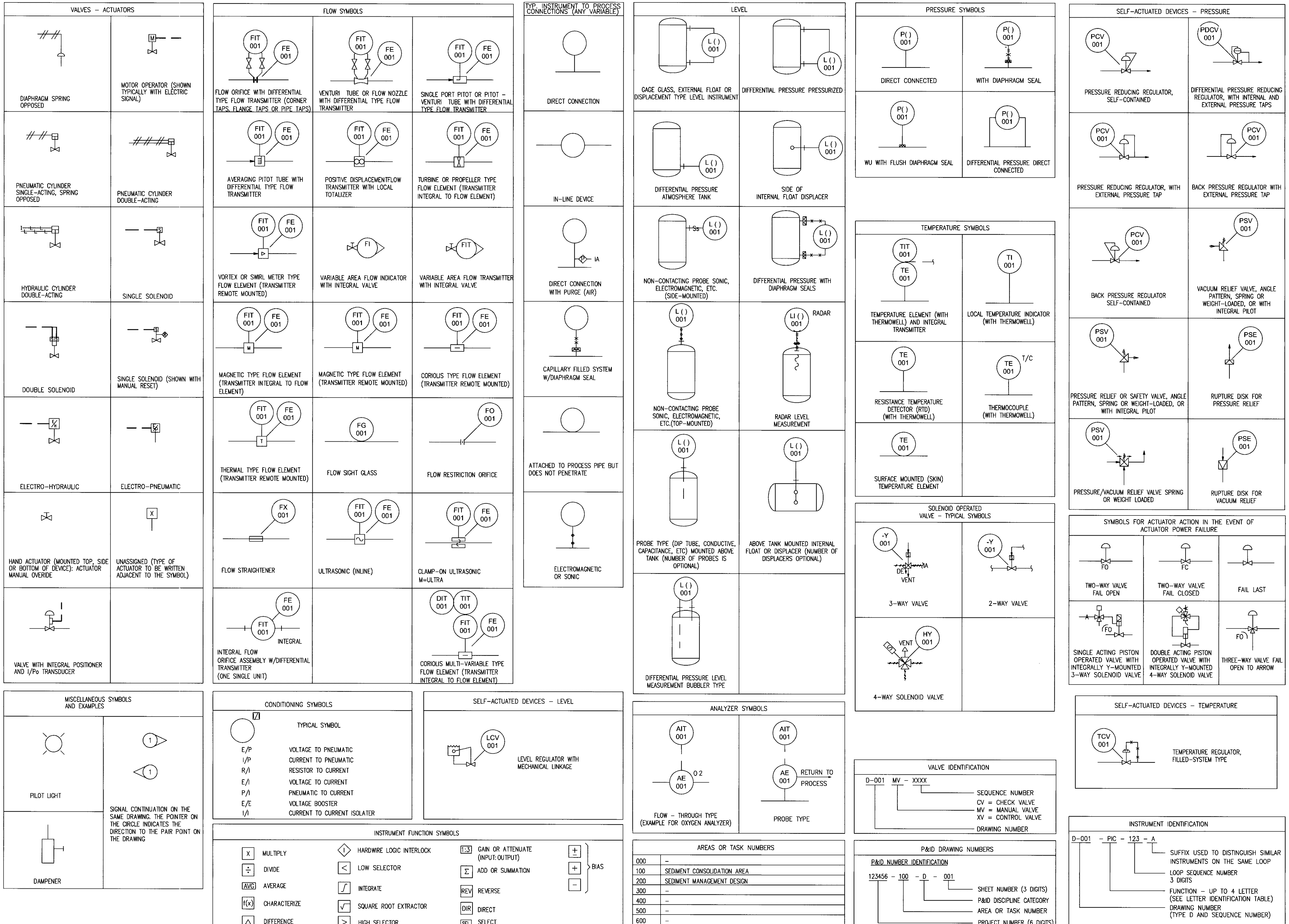
PROJECT TITLE: Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE: P&ID LEGEND AND ABBREVIATION SHEET 1 OF 2

SCALE: NO SCALE

DRAWING NO. 444853-200-D-101 REV. 0

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



AREAS OR TASK NUMBERS

000	-
100	SEDIMENT CONSOLIDATION AREA
200	SEDIMENT MANAGEMENT DESIGN
300	-
400	-
500	-
600	-

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY DDS	7/29/11
APPROVED BY TCD	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW YORK – MARK T. OTTO – LICENSED PROFESSIONAL ENGINEER – 081376

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

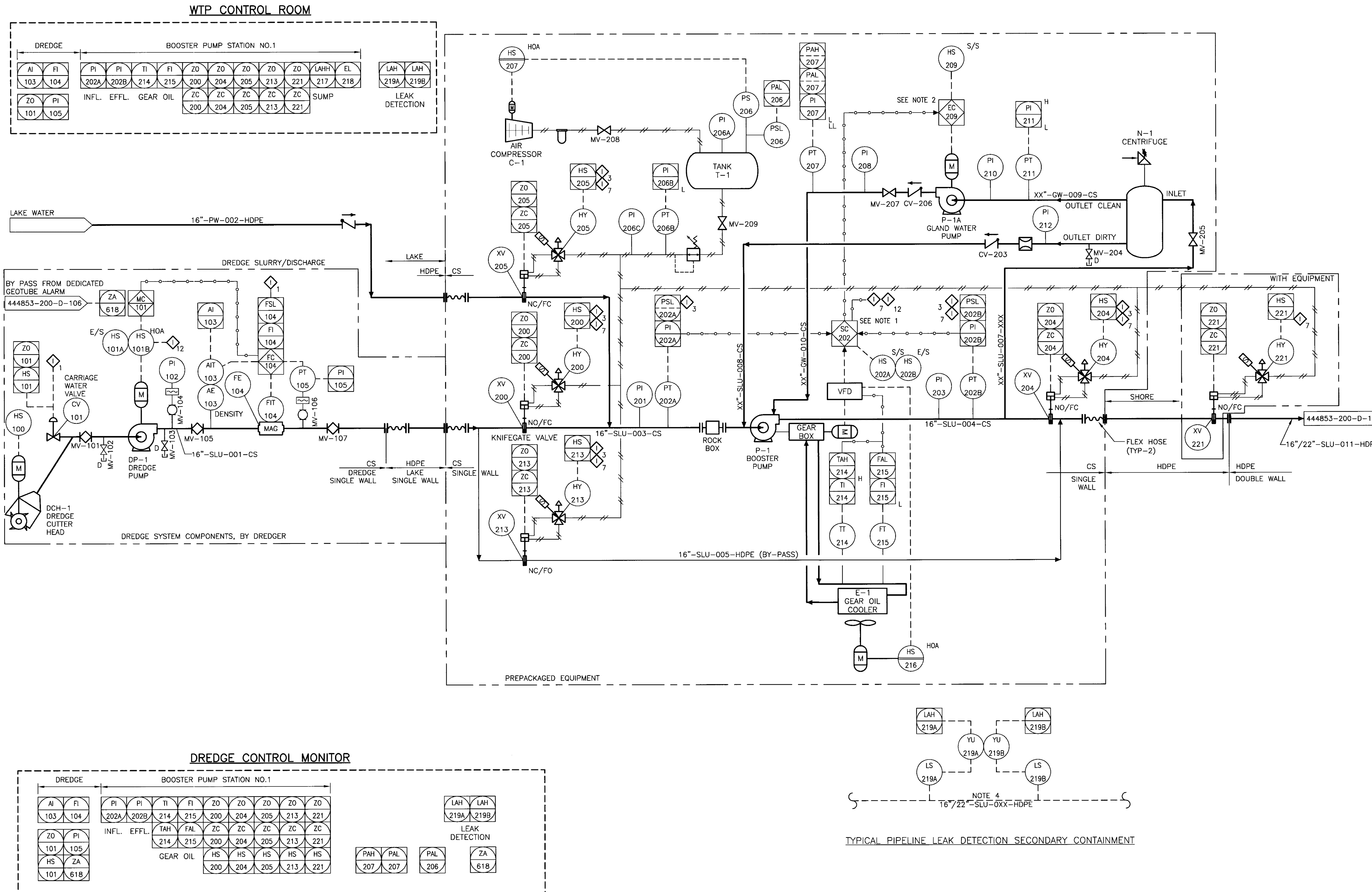
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
P&ID LEGEND AND ABBREVIATION SHEET
2 OF 2

SCALE: NO SCALE

DRAWING NO.: 444853-200-D-101A REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\PID\444853-200-D-101A.DWG
PLOT DATE: 7/28/2011 5:48 PM PLOTTED BY: SVALIA, JACK



C-1	T-1	P-1	E-1	P-1A	N-1
AIR COMPRESSOR	AIR COMPRESSOR TANK	BOOSTER PUMP	GEAR OIL COOLER	GLAND WATER PUMP	CENTRIFUGE
MFR: TBD	MFR: TBD	MFR: WEIR MINERALS	MFR: TBD	MFR: TBD	MFR: TBD
MODEL: TBD	MODEL: TBD	MODEL: BO-5450-E-SP	MODEL: TBD	MODEL: TBD	MODEL: TBD
CAPACITY: TBD	CAPACITY: TBD	CAPACITY: 5,450 GPM @ 230' TDH 600 HP, 480 VAC	CAPACITY: TBD	CAPACITY: TBD GPM @ TBD' TDH	CAPACITY: TBD

DCH-1	DP-1
DREDGE CUTTER HEAD	DREDGE PUMP
MFR: TBD	MFR: TBD
MODEL: TBD	MODEL: TBD
CAPACITY: TBD 150 HP, 480V	CAPACITY: TBD GPM @ TBD' TDH DIESEL DRIVEN

NOTES:

1. D-102-SC-202 IS THE LOGIC BLOCK THAT CONTROLS THE VFD. IN MANUAL MODE, THE VFD CAN BE STARTED OR STOPPED LOCALLY OR REMOTELY VIA THE COMMUNICATIONS NETWORK. IN AUTOMATIC MODE, THE VFD WILL START WHEN THE INLET PRESSURE RISES ABOVE A START-UP SETPOINT. THE VFD SPEED WILL BE CONTROLLED TO MAINTAIN A PRESET INLET OR DISCHARGE PRESSURE. THE VFD WILL STOP WHEN THE DISCHARGE PRESSURE DROPS BELOW A SHUTDOWN SETPOINT.
2. D-102-EC-209 IS THE LOGIC BLOCK THAT CONTROLS THE GLAND WATER PUMP. IN MANUAL MODE, THE PUMP CAN BE STARTED OR STOPPED LOCALLY OR REMOTELY VIA THE COMMUNICATIONS NETWORK. IN AUTOMATIC MODE, THE PUMP WILL START AND STOP WITH THE MAIN PUMP.
3. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

	DATE
DRAWN BY JTS	7/29/11
CHECKED BY DDS	7/29/11
APPROVED BY TCD	7/29/11
PROJECT MGR. PEB	7/29/11

SEAL: STATE OF NEW YORK — MARK T. OTTEN — LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

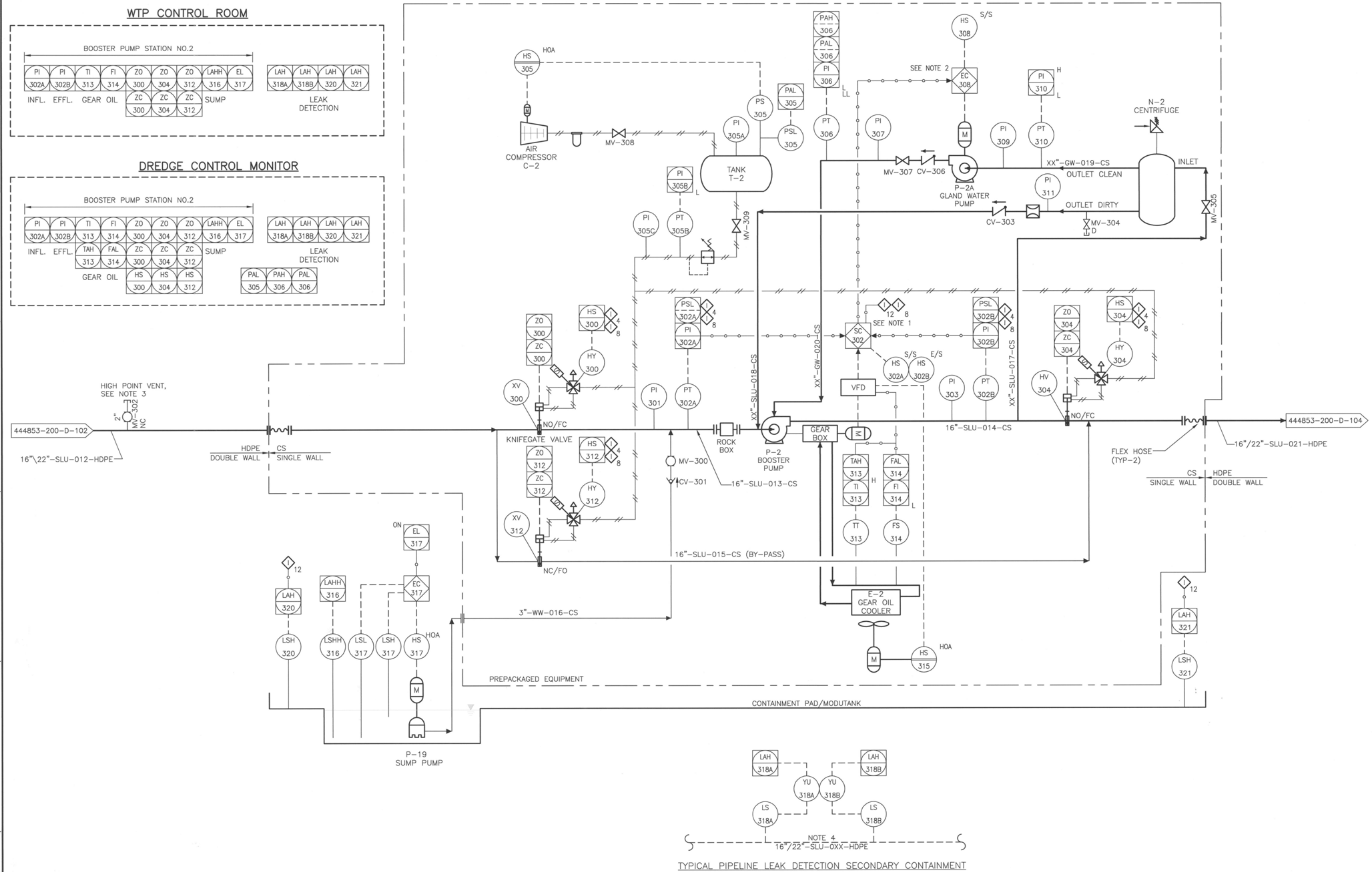
OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
SLURRY PIPELINE
DREDGE & BOOSTER PUMP 1

SCALE: NO SCALE

DRAWING NO.: 444853-200-D-102 REV.: 0



P-19 SUMP PUMP	C-2 AIR COMPRESSOR	T-2 AIR COMPRESSOR TANK	P-2 BOOSTER PUMP	E-2 GEAR OIL COOLER	P-2A GLAND WATER PUMP	N-2 CENTRIFUGE
MFR: TBD	MFR: TBD	MFR: TBD	MFR: WEIR MINERALS	MFR: TBD	MFR: TBD	MFR: TBD
MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: BO-5450-E-SP	MODEL: TBD	MODEL: TBD	MODEL: TBD
CAPACITY: 20 GPM @ 100' TDH 1 HP, 480V	CAPACITY: TBD	CAPACITY: TBD	CAPACITY: 5,450 GPM @ 230' TDH 600 HP, 480 VAC	CAPACITY: TBD	CAPACITY: TBD GPM @ TBD' TDH	CAPACITY: TBD

NOTES:

1. D-103-SC-302 IS THE LOGIC BLOCK THAT CONTROLS THE VFD. IN MANUAL MODE, THE VFD CAN BE STARTED OR STOPPED LOCALLY OR REMOTELY VIA THE COMMUNICATIONS NETWORK. IN AUTOMATIC MODE, THE VFD WILL START WHEN THE INLET PRESSURE RISES ABOVE A START-UP SETPOINT. THE VFD SPEED WILL BE CONTROLLED TO MAINTAIN A PRESET INLET OR DISCHARGE PRESSURE. THE VFD WILL STOP WHEN THE DISCHARGE PRESSURE DROPS BELOW A SHUTDOWN SETPOINT.
2. D-103-EC-308 IS THE LOGIC BLOCK THAT CONTROLS THE GLAND WATER PUMP. IN MANUAL MODE, THE PUMP CAN BE STARTED OR STOPPED LOCALLY OR REMOTELY VIA THE COMMUNICATIONS NETWORK. IN AUTOMATIC MODE, THE PUMP WILL START AND STOP WITH THE MAIN PUMP.
3. 2" HIGH POINT VENT TO BE ADDED TO HIGH POINTS ALONG SLURRY PIPELINE.
4. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY: JTS	DATE: 7/29/11	SEAL: STATE OF NEW YORK, MARK T. OTTEN, LICENSED PROFESSIONAL ENGINEER, 061878
CHECKED BY: DDS	DATE: 7/29/11	
APPROVED BY: TCD	DATE: 7/29/11	
PROJECT MGR.: PEB	DATE: 7/29/11	

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560

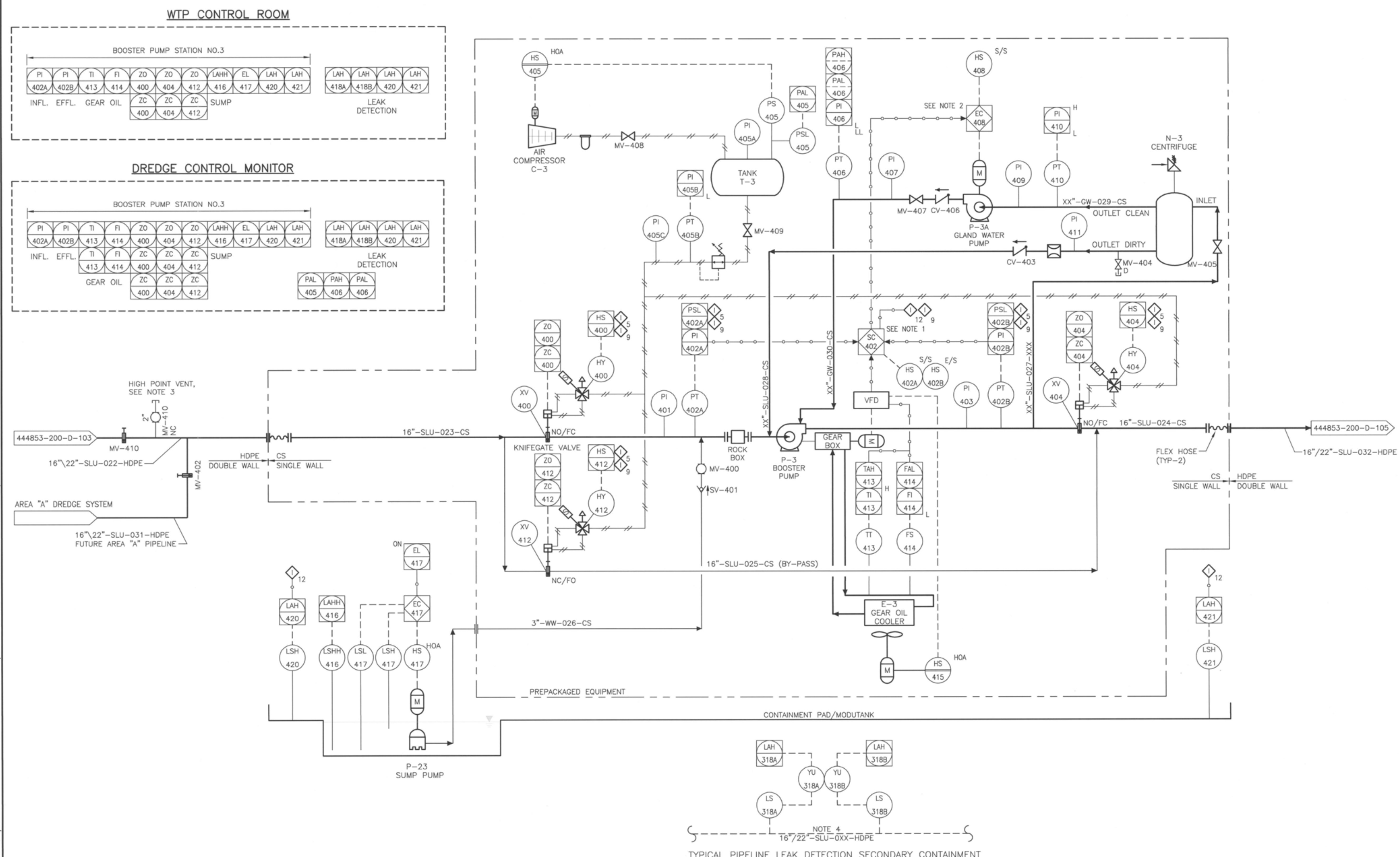
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
SLURRY PIPELINE
BOOSTER PUMP 2

SCALE: NO SCALE

DRAWING NO.: 444853-200-D-103
REV.: 0



P-23 SUMP PUMP	C-3 AIR COMPRESSOR	T-3 AIR COMPRESSOR TANK	P-3 BOOSTER PUMP	E-3 GEAR OIL COOLER	P-3A GLAND WATER PUMP	N-3 CENTRIFUGE
MFR: TBD	MFR: TBD	MFR: TBD	MFR: WEIR MINERALS	MFR: TBD	MFR: TBD	MFR: TBD
MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: BO-5450-E-SP	MODEL: TBD	MODEL: TBD	MODEL: TBD
CAPACITY:150 GPM @ TBD' TDH 20 HP, 480V	CAPACITY: TBD	CAPACITY: TBD	CAPACITY: 5,450 GPM @ 230' TDH 600 HP, 480 VAC	CAPACITY: TBD	CAPACITY: TBD GPM @ TBD' TDH	CAPACITY: TBD

NOTES:

1. D-104-SC-402 IS THE LOGIC BLOCK THAT CONTROLS THE VFD. IN MANUAL MODE, THE VFD CAN BE STARTED OR STOPPED LOCALLY OR REMOTELY VIA THE COMMUNICATIONS NETWORK. IN AUTOMATIC MODE, THE VFD WILL START WHEN THE INLET PRESSURE RISES ABOVE A START-UP SETPOINT. THE VFD SPEED WILL BE CONTROLLED TO MAINTAIN A PRESET INLET OR DISCHARGE PRESSURE. THE VFD WILL STOP WHEN THE DISCHARGE PRESSURE DROPS BELOW A SHUTDOWN SETPOINT.
2. D-104-EC-408 IS THE LOGIC BLOCK THAT CONTROLS THE GLAND WATER PUMP. IN MANUAL MODE, THE PUMP CAN BE STARTED OR STOPPED LOCALLY OR REMOTELY VIA THE COMMUNICATIONS NETWORK. IN AUTOMATIC MODE, THE PUMP WILL START AND STOP WITH THE MAIN PUMP.
3. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	DATE 7/29/11
CHECKED BY	DDS	DATE 7/29/11
APPROVED BY	TCD	DATE 7/29/11
PROJECT MGR.	PEB	DATE 7/29/11

SEAL: STATE OF NEW YORK — MARK T. OTTEN — 081375 — LICENSED PROFESSIONAL ENGINEER — 8/29/2011

PARSONS
COMMERCIAL TECHNOLOGY GROUP

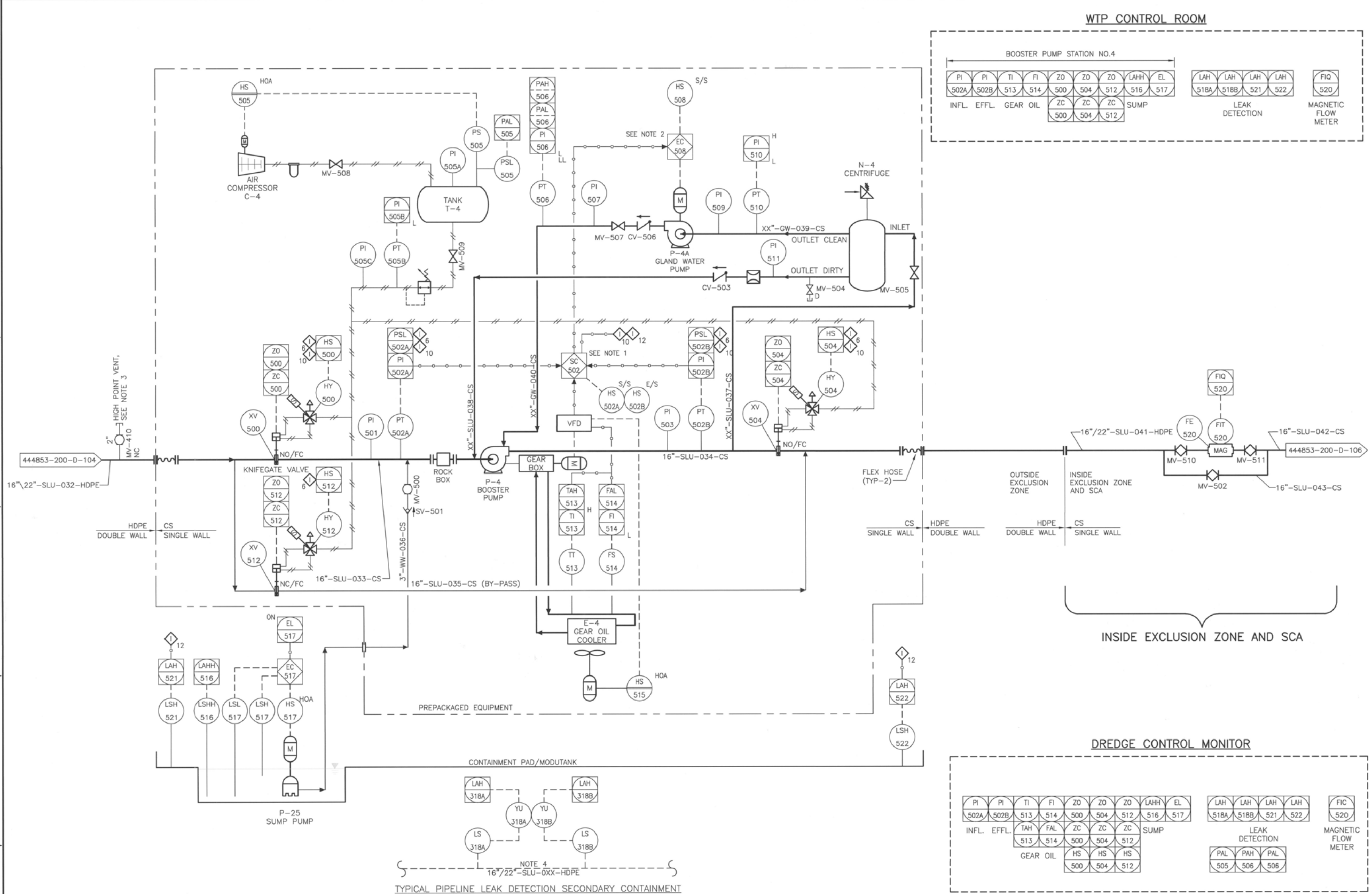
OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
SLURRY PIPELINE
BOOSTER PUMP 3

SCALE: NO SCALE

DRAWING NO. 444853-200-D-104 REV. 0



P-25	C-4	T-4	P-4	E-4	P-4A	N-4
SUMP PUMP	AIR COMPRESSOR	AIR COMPRESSOR TANK	BOOSTER PUMP	GEAR OIL COOLER	GLAND WATER PUMP	CENTRIFUGE
MFR: TBD	MFR: TBD	MFR: TBD	MFR: WEIR MINERALS	MFR: TBD	MFR: TBD	MFR: TBD
MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: BO-5450-E-SP	MODEL: TBD	MODEL: TBD	MODEL: TBD
CAPACITY:20 GPM @ 100' TDH 1 HP, 480V	CAPACITY: TBD	CAPACITY: TBD	CAPACITY: 5,450 GPM @ 230' TDH 600 HP, 480 VAC	CAPACITY: TBD	CAPACITY: TBD GPM @ TBD' TDH	CAPACITY: TBD

NOTES:

1. D-105-SC-502 IS THE LOGIC BLOCK THAT CONTROLS THE VFD. IN MANUAL MODE, THE VFD CAN BE STARTED OR STOPPED LOCALLY OR REMOTELY VIA THE COMMUNICATIONS NETWORK. IN AUTOMATIC MODE, THE VFD WILL START WHEN THE INLET PRESSURE RISES ABOVE A START-UP SETPOINT. THE VFD SPEED WILL BE CONTROLLED TO MAINTAIN A PRESET INLET OR DISCHARGE PRESSURE. THE VFD WILL STOP WHEN THE DISCHARGE PRESSURE DROPS BELOW A SHUTDOWN SETPOINT.
2. D-105-EC-508 IS THE LOGIC BLOCK THAT CONTROLS THE GLAND WATER PUMP. IN MANUAL MODE, THE PUMP CAN BE STARTED OR STOPPED LOCALLY OR REMOTELY VIA THE COMMUNICATIONS NETWORK. IN AUTOMATIC MODE, THE PUMP WILL START AND STOP WITH THE MAIN PUMP.
3. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	DATE 7/29/11
CHECKED BY	DDS	DATE 7/29/11
APPROVED BY	TCD	DATE 7/29/11
PROJECT MGR.	PEB	DATE 7/29/11

SEAL: STATE OF NEW YORK · MARK T. OTTEN · LICENSED PROFESSIONAL ENGINEER · 061375

PARSONS
COMMERCIAL TECHNOLOGY GROUP
OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560

JOB: 444853
WBS: 04620

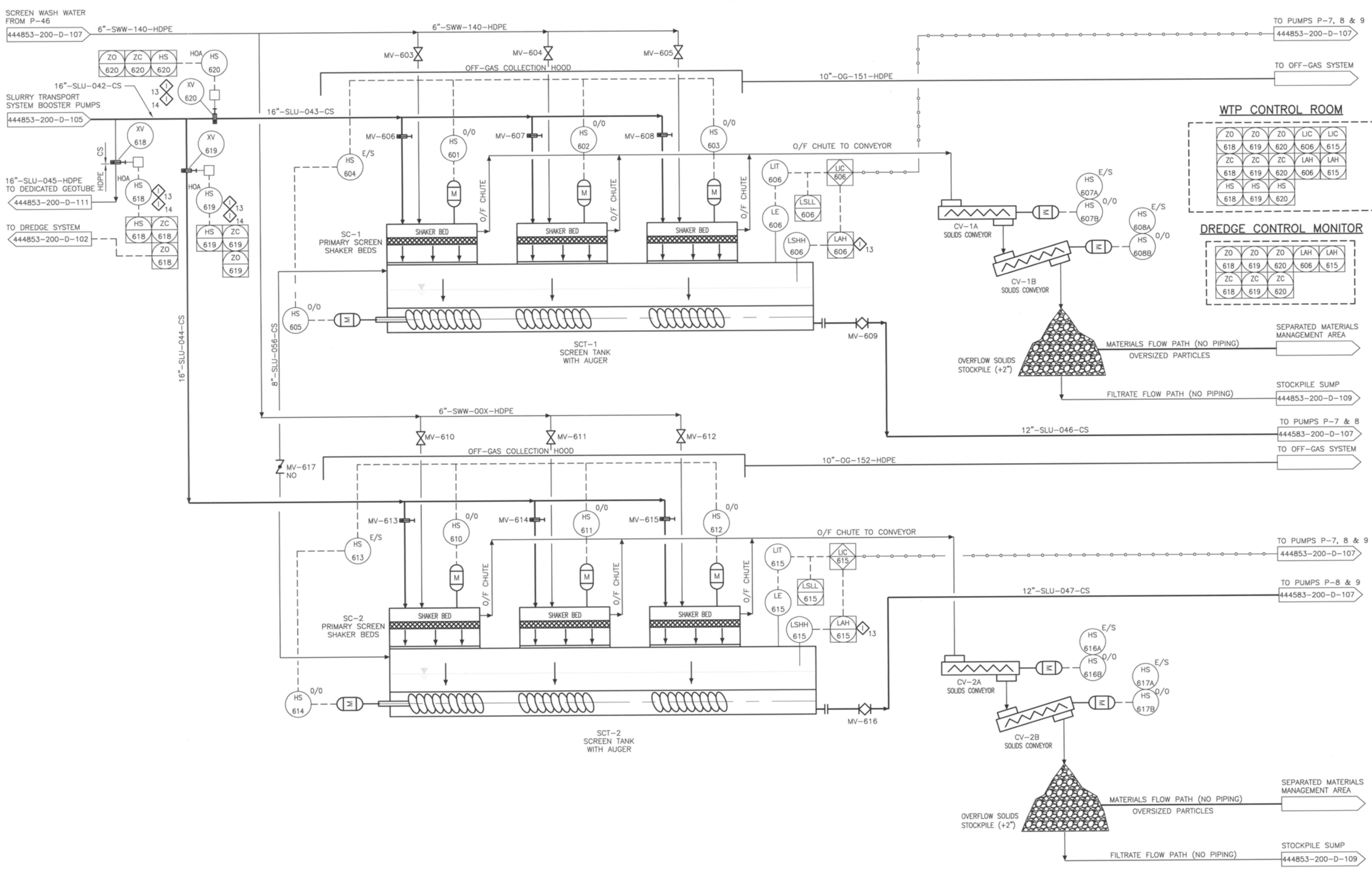
PROJECT TITLE: Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE: SLURRY TRANSPORT SYSTEM P&ID
SLURRY PIPELINE
BOOSTER PUMP 4

SCALE: NO SCALE

DRAWING NO. 444853-200-D-105 REV. 0

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



SC–1 PRIMARY SCREEN SHAKER BEDS	SCT–1 SCREEN TANK W/ AUGER	SC–2 PRIMARY SCREEN SHAKER BEDS	SCT–2 SCREEN TANK W/ AUGER	CV–1A SOLIDS CONVEYOR	CV–1B SOLIDS CONVEYOR	CV–2A SOLIDS CONVEYOR	CV–2B SOLIDS CONVEYOR
MFR: TBD	MFR: TBD	MFR: TBD	MFR: TBD	MFR: TBD	MFR: XXX	MFR: TBD	MFR: TBD
MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL:TBD	MODEL: TBD	MODEL: TBD
CAPACITY: 5,000 GPM VIBRATORY SCREEN MOTORS 15 HP, 480V	CAPACITY: 11,700 GAL SHAFTLESS AUGER MOTOR 15 HP, 480V	CAPACITY: 5,000 GPM VIBRATORY SCREEN MOTORS 15 HP, 480V	CAPACITY: 11,700 GAL SHAFTLESS AUGER MOTOR 15 HP, 480V	CAPACITY: N/A TBD' DIA x TBD' CONVEYOR MOTOR 25 HP, 480V	CAPACITY: N/A TBD' DIA x TBD' CONVEYOR MOTOR 17 HP, 480V	CAPACITY: N/A TBD' DIA x TBD' CONVEYOR MOTOR 25 HP, 480V	CAPACITY: N/A TBD' DIA x TBD' CONVEYOR MOTOR 17 HP, 480V

NOTES:

1. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	DATE 7/29/11
CHECKED BY	DDS	DATE 7/29/11
APPROVED BY	TCD	DATE 7/29/11
PROJECT MGR.	PEB	DATE 7/29/11

SEAL: STATE OF NEW YORK · MARK T. OTTEN · 061376 · LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

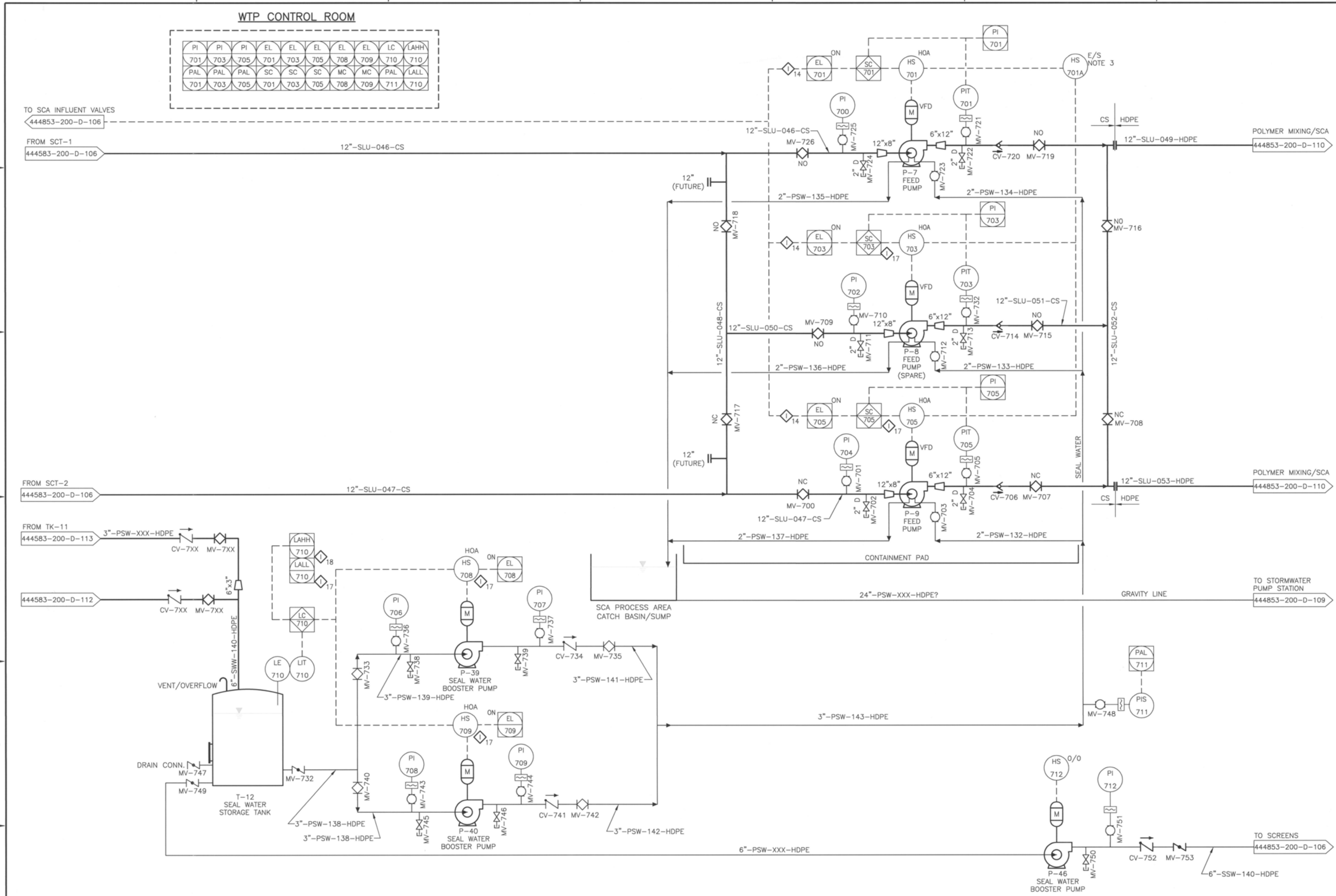
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
SLURRY PRECONDITIONING
PRIMARY SCREENS & TANKS

SCALE: NO SCALE

DRAWING NO. 444853-200-D-106 | REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\PID\444853-200-D-102 TO 107.DWG
PLOT DATE: 8/24/2011 8:01 AM PLOTTED BY: SIVALIA, JACK



T-12
SEAL WATER
STORAGE TANK
MFR: TBD
MODEL: TBD
CAPACITY:8000

P-39
SEAL WATER
BOOSTER PUMP
MFR: TBD
MODEL: TBD
CAPACITY: TBD GPM @ TBD' TDH
TBDHP, 480V

P-40
SEAL WATER
BOOSTER PUMP
MFR: TBD
MODEL: TBD
CAPACITY: TBD GPM @ TBD' TDH
TBDHP, 480V

P-7, 8 & 9
GEOTEXTILE TUBE
FEED PUMPS
MFR: TBD
MODEL: TBD
CAPACITY: 3000 GPM @ 280' TDH
350HP, 480V, VFD

P-46
SCREEN WASH
WATER PUMP
MFR: TBD
MODEL: TBD
CAPACITY: 300 GPM @ 105' TDH
10 HP, 480V

NOTES:

1. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.
2. IN AUTOMATIC MODE, THE SEAL WATER BOOSTER PUMPS WILL START AND STOP WITH THE GEOTEXTILE TUBE FEED PUMPS.
3. HS-701A IS LOCATED AT SCA EAST BASIN.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APP'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	7/29/11
CHECKED BY	DDS	7/29/11
APPROVED BY	TCD	7/29/11
PROJECT MGR.	PEB	7/29/11

SEAL: STATE OF NEW YORK · MARK T. OTTEN · 061376 · LICENSED PROFESSIONAL ENGINEER · 8/1/2011

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

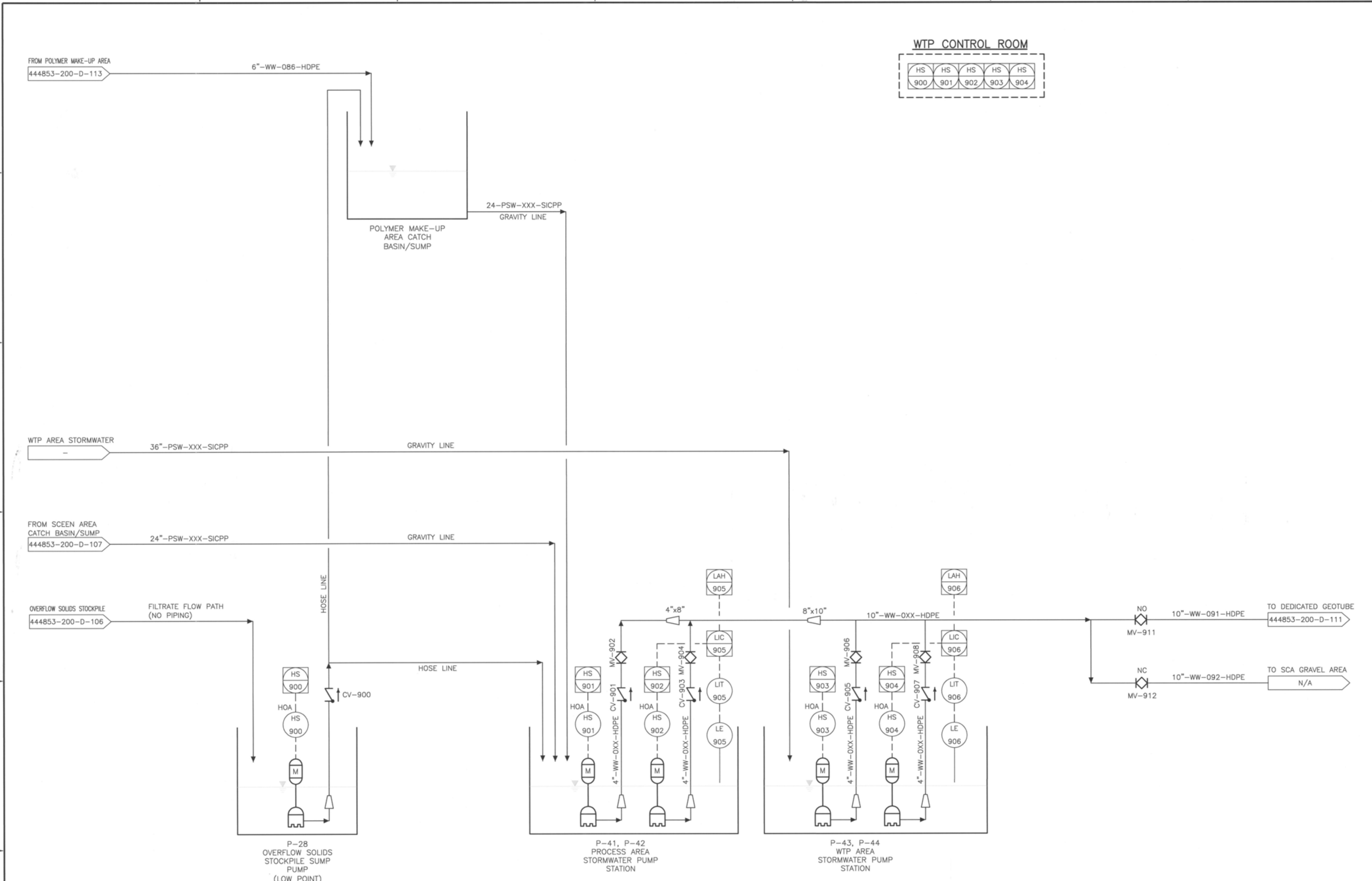
DRAWING TITLE
SLURRY TRANSPORT SYSTEM P&ID
SLURRY PRECONDITIONING
GEOTEXTILE TUBE FEED PUMPS

SCALE NO SCALE

DRAWING NO. 444853-200-D-107 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\PID\444853-200-D-102 TO 107.DWG
PLOT DATE: 7/28/2011 5:59 PM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



P-28
OVERFLOW SOLIDS STOCKPILE SUMP PUMP
MFR: TBD
MODEL: TBD
CAPACITY: 250 GPM @ 50' TDH
5 HP, 480V

P-41, P-42
PROCESS AREA STORMWATER PUMP STATION
MFR: TBD
MODEL: TBD
CAPACITY: XXX GPM @ 50' TDH
XX HP, 480V

P-43, P-44
WTP AREA STORMWATER PUMP STATION
MFR: TBD
MODEL: TBD
CAPACITY: XXX GPM @ 50' TDH
XX HP, 480V

NOTES:

1. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY: JTS	DATE: 7/29/11
CHECKED BY: DDS	DATE: 7/29/11
APPROVED BY: TCD	DATE: 7/29/11
PROJECT MGR.: PEB	DATE: 7/29/11

SEAL: STATE OF NEW YORK — MARK T. OTTEN — 081376 — LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

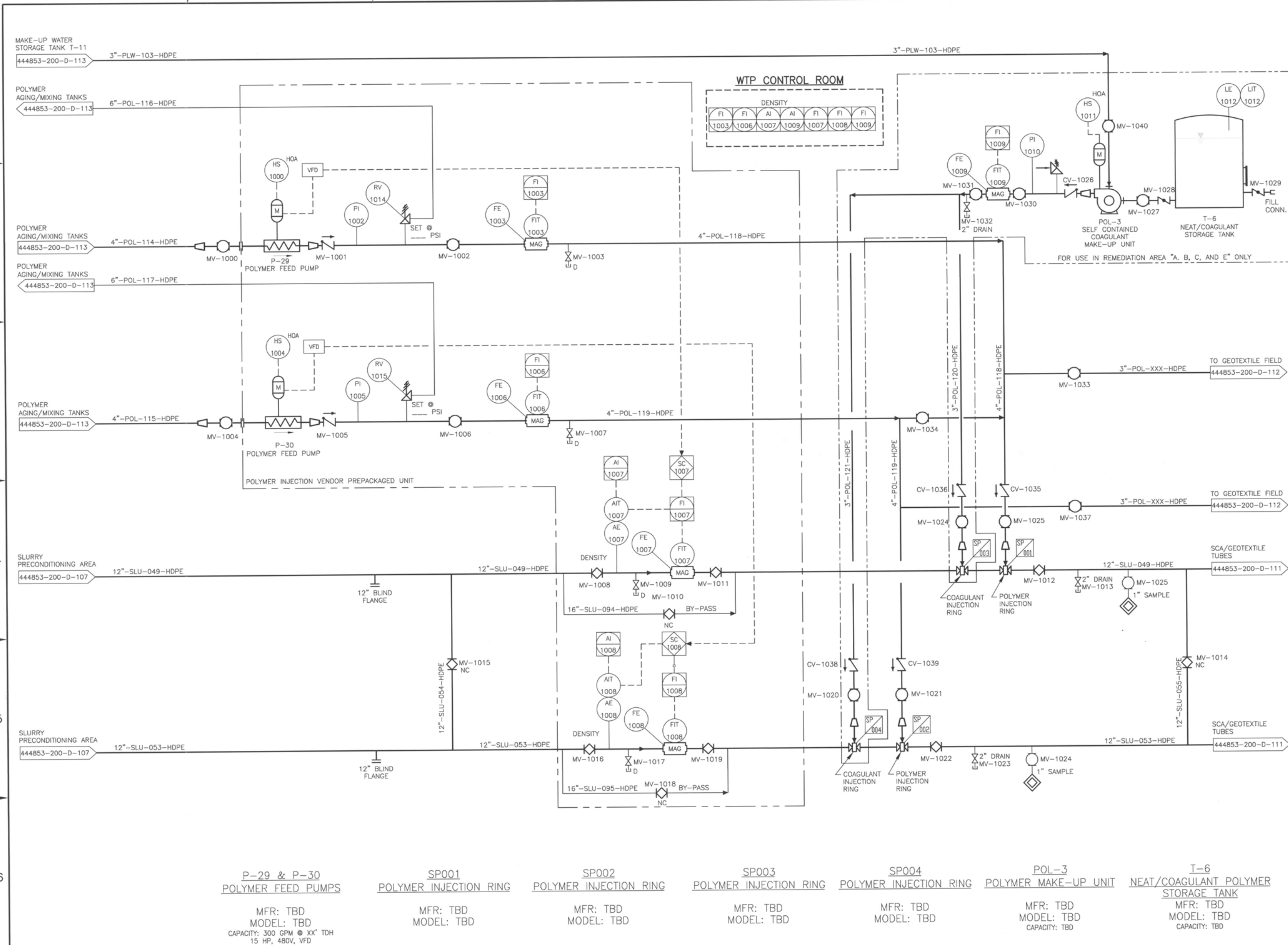
DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
SLURRY PRECONDITIONING OVERFLOW SOLIDS STOCKPILE SUMP PUMP

SCALE: NO SCALE

DRAWING NO.: 444853-200-D-109
REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\PID\444853-200-D-108 TO 113.DWG
PLOT DATE: 8/24/2011 8:03 AM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



P-29 & P-30 POLYMER FEED PUMPS	SP001 POLYMER INJECTION RING	SP002 POLYMER INJECTION RING	SP003 POLYMER INJECTION RING	SP004 POLYMER INJECTION RING	POL-3 POLYMER MAKE-UP UNIT	T-6 NEAT/COAGULANT POLYMER STORAGE TANK
MFR: TBD MODEL: TBD CAPACITY: 300 GPM @ XX' TDH 15 HP, 480V, VFD	MFR: TBD MODEL: TBD	MFR: TBD MODEL: TBD	MFR: TBD MODEL: TBD	MFR: TBD MODEL: TBD	MFR: TBD MODEL: TBD CAPACITY: TBD	MFR: TBD MODEL: TBD CAPACITY: TBD

NOTES:

1. THERE WILL TWO 12" SLURRY LINES TO SCA. TRANSITION TO DOUBLE WALL SHALL BE BETWEEN PROCESS AREA AND SCA PERIMETER BERMS.
2. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	DATE 7/29/11
CHECKED BY	DDS	DATE 7/29/11
APPROVED BY	TCD	DATE 7/29/11
PROJECT MGR.	PEB	DATE 7/29/11

STATE OF NEW YORK · MARK ... OTTEN · LICENSED PROFESSIONAL ENGINEER · 081375

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

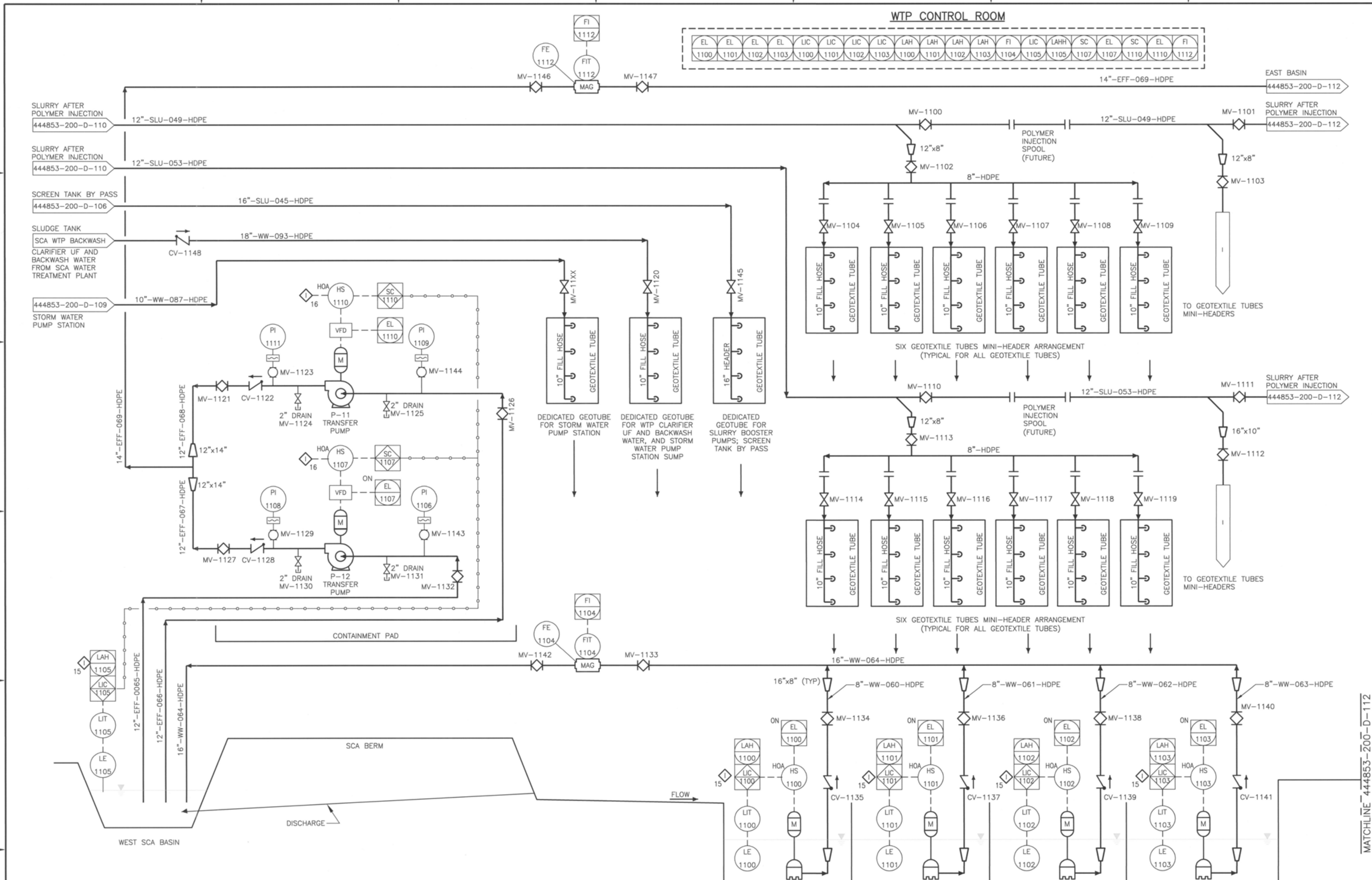
DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
POLYMER FEED SYSTEM

SCALE: NO SCALE

DRAWING NO. 444853-200-D-110 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\PID\444853-200-D-108 TO 113.DWG
PLOT DATE: 7/28/2011 6:10 PM PLOTTED BY: SIVALIA, JACK

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



P-11 & P-12
SCA/WEST BASIN
TRANSFER PUMPS
MFR: TBD
MODEL: TBD
CAPACITY: 3000 GPM @ 90' TDH
100 HP, 480V, VFD

P-31A
SCA SUMP PUMP
MFR: TBD
MODEL: TBD
CAPACITY: 1500 GPM @ 90' TDH
75 HP, 480V

P-31B
SCA SUMP PUMP
MFR: TBD
MODEL: TBD
CAPACITY: 1500 GPM @ 90' TDH
75 HP, 480V

P-31C
SCA SUMP PUMP
MFR: TBD
MODEL: TBD
CAPACITY: 1500 GPM @ 90' TDH
75 HP, 480V

P-31D
SCA SUMP PUMP
MFR: TBD
MODEL: TBD
CAPACITY: 1500 GPM @ 90' TDH
75 HP, 480V

NOTES:

1. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APP'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	DATE 7/29/11
CHECKED BY	DDS	DATE 7/29/11
APPROVED BY	TCD	DATE 7/29/11
PROJECT MGR.	PEB	DATE 7/29/11

SEAL: STATE OF NEW YORK — MARK T. OTTEN — LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

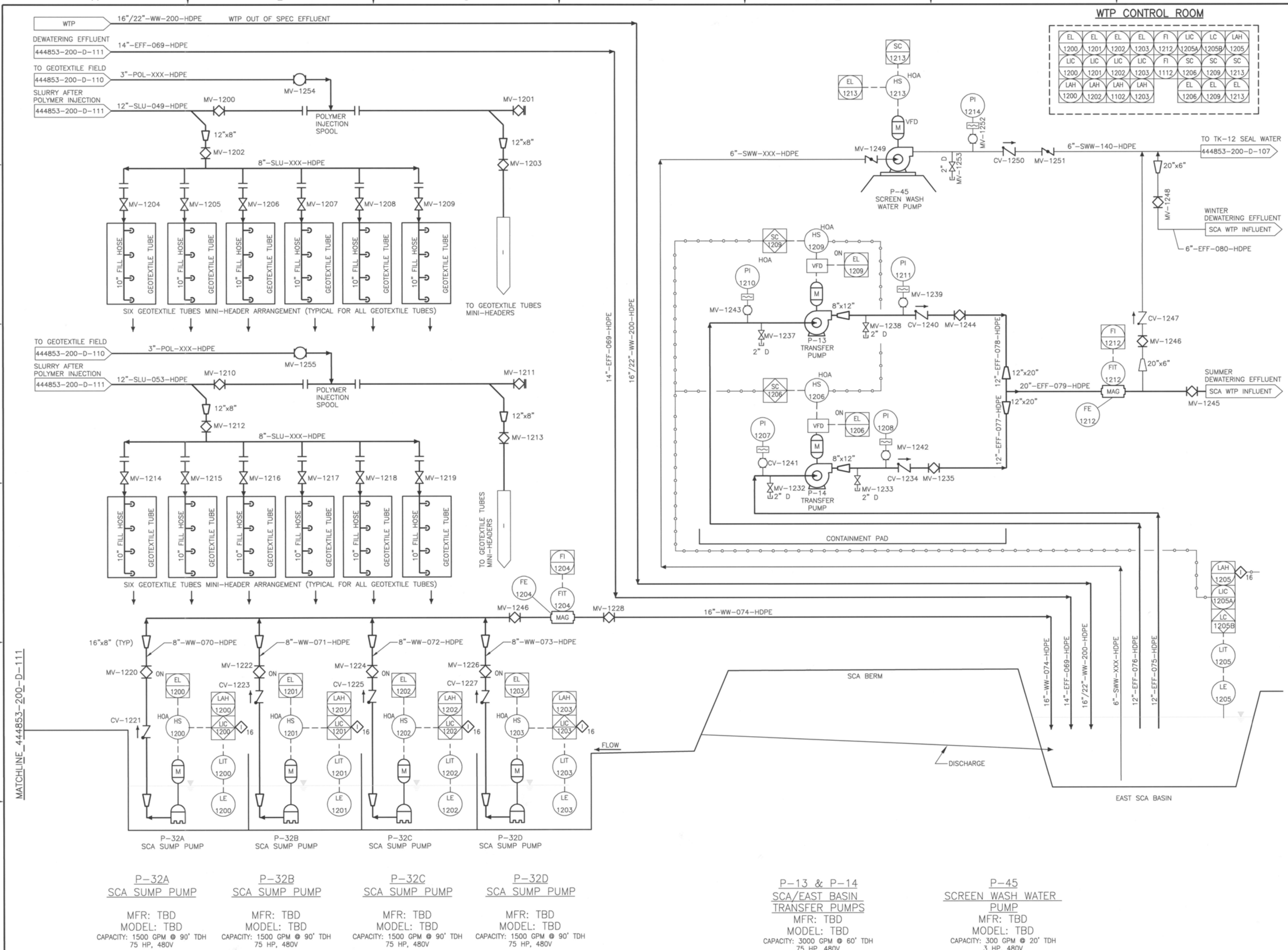
PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
SCA AND WEST BASIN

SCALE: NO SCALE

DRAWING NO. 444853-200-D-111 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\PID\444853-200-D-108 TO 113.DWG
PLOT DATE: 7/28/2011 6:10 PM PLOTTED BY: SIVALIA, JACK



NOTES:

1. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	DATE 7/29/11
CHECKED BY	DDS	DATE 7/29/11
APPROVED BY	TCD	DATE 7/29/11
PROJECT MGR.	PEB	DATE 7/29/11

SEAL: STATE OF NEW YORK · MARK T. OTTEN · 061376 · LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

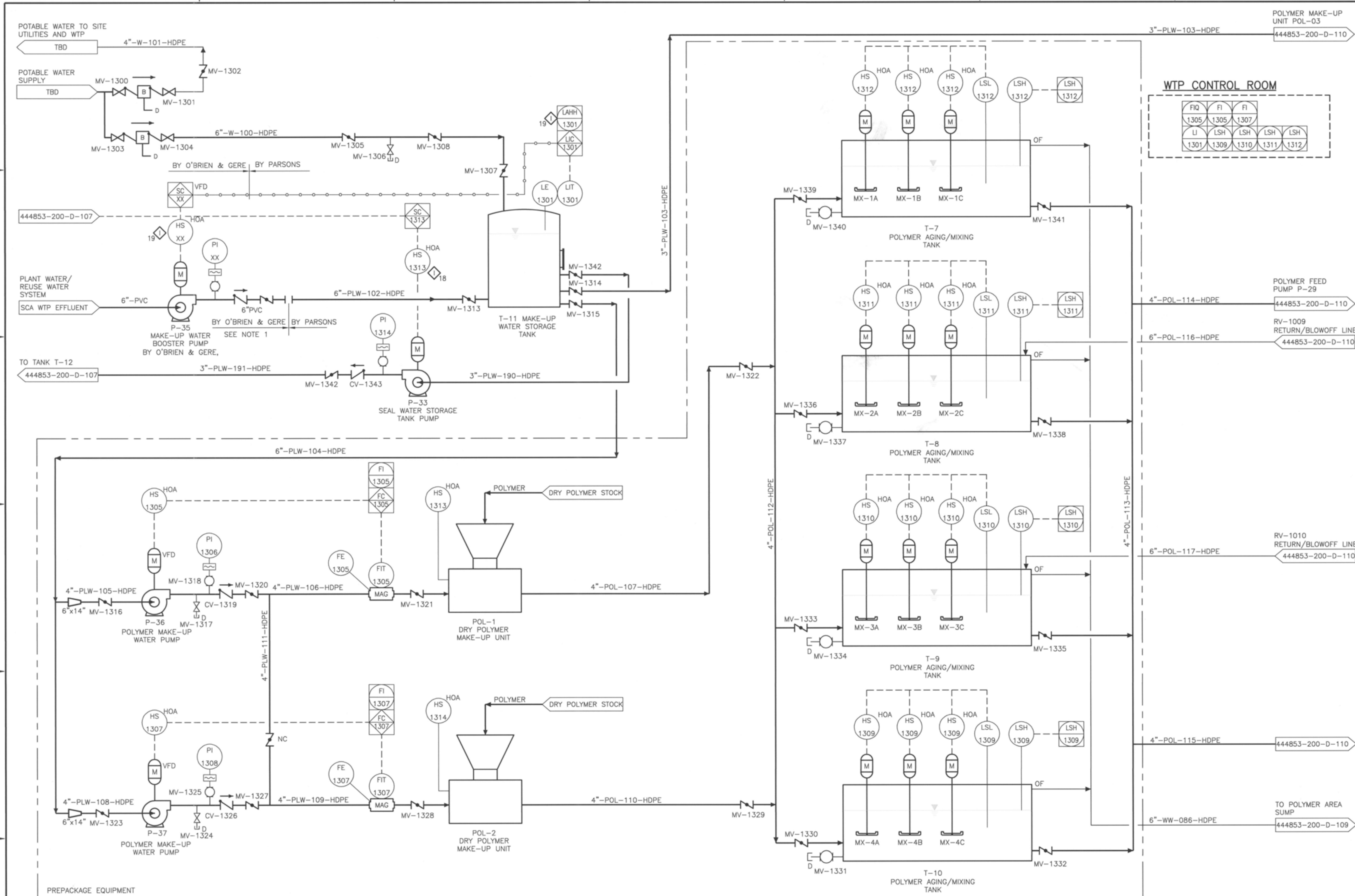
OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
SCA AND EAST BASIN

SCALE: NO SCALE

DRAWING NO. 444853-200-D-112 REV. 0



P-36 & 37 POLYMER MAKE-UP WATER PUMPS	P-35 MAKE-UP WATER BOOSTER PUMP	POL-1 & 2 DRY POLYMER MAKE-UP UNIT	T-11 MAKE-UP WATER STORAGE TANK	T-7, 8, 9 & 10 POLYMER AGING/MIXING TANKS	MX-1A,B,C POLYMER MIXERS	MX-2A,B,C POLYMER MIXERS	MX-3A,B,C POLYMER MIXERS	MX-4A,B,C POLYMER MIXERS
MFR: TBD	MFR: TBD	MFR: TBD	MFR: TBD	MFR: TBD	MFR: TBD	MFR: TBD	MFR: TBD	MFR: TBD
MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: TBD	MODEL: TBD
CAPACITY: 300 GPM @ TBD' TDH 15 HP, TBD	CAPACITY: 600 GPM @ TBD' TDH 15 HP, TBD	CAPACITY: TBD GAL TBD' DIA x TBD	CAPACITY: 17,500 GAL TBD' DIA x TBD	CAPACITY: 22,000 GAL TBD' DIA x TBD	SIZE: TBD RPM 10HP, 480V	SIZE: TBD RPM 10HP, 480V	SIZE: TBD RPM 10HP, 480V	SIZE: TBD RPM 10HP, 480V

NOTES:

1. SEE WTP DESIGN DRAWINGS FOR EQUIPMENT NUMBERS, LINE SIZES AND INSTRUMENT NUMBERS.
2. SEE DRAWING 444853-200-D-114 FOR CONTROL STRATEGY AND INTERLOCK LIST.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY	JTS	7/29/11
CHECKED BY	DDS	7/29/11
APPROVED BY	TCD	7/29/11
PROJECT MGR.	PEB	7/29/11

PARSONS
COMMERCIAL TECHNOLOGY GROUP

301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

SLURRY TRANSPORT SYSTEM P&ID
DRY POLYMER MIXING AND MAKE-UP WATER

SCALE: NO SCALE

DRAWING NO. 444853-200-D-113 REV. 0

SCHEDULE OF INTERLOCKS

INTERLOCK NO.	P&ID DWG.	INTERLOCK DESCRIPTION
I 1	444853-200-D-102:	LOW FLOW SET POINT FSL-104: OPEN CARRIAGE WATER VALVE CV-101. RETURN TO NORMAL OPERATION WILL BE UNDER CONTROL OF THE DREDGE OPERATOR.
I 2		(NOT USED)
I 3	444853-200-D-102:	DIFFERENTIAL PRESSURE ACROSS PT-202A AND PT-202B BELOW SETPOINT: OPEN BYPASS VALVE XV-213 THEN CLOSE VALVES XV-200, XV-204, AND XV-205. PROVIDE RESET UNDER CONTROL OF THE DREDGE OPERATOR, 0-180 SECOND (ADJUSTABLE) DELAY OVERRIDE OF PRESSURE ALARMS AVAILABLE FOR STARTING PUMP (TYP).
I 4	444853-200-D-103:	DIFFERENTIAL PRESSURE ACROSS PT-302A AND PT-302B BELOW SETPOINT: OPEN BYPASS VALVE XV-312 THEN CLOSE VALVES XV-300 AND XV-304. PROVIDE RESET UNDER CONTROL OF THE DREDGE OPERATOR, 0-180 SECOND (ADJUSTABLE) DELAY OVERRIDE OF PRESSURE ALARMS AVAILABLE FOR STARTING PUMP (TYP).
I 5	444853-200-D-104:	DIFFERENTIAL PRESSURE ACROSS PT-402A AND PT-402B BELOW SETPOINT: OPEN BYPASS VALVE XV-412 THEN CLOSE VALVES XV-400 AND XV-404. PROVIDE RESET UNDER CONTROL OF THE DREDGE OPERATOR, 0-180 SECOND (ADJUSTABLE) DELAY OVERRIDE OF PRESSURE ALARMS AVAILABLE FOR STARTING PUMP (TYP).
I 6	444853-200-D-105:	DIFFERENTIAL PRESSURE ACROSS PT-502A AND PT-502B BELOW SETPOINT: OPEN BYPASS VALVE XV-512 THEN CLOSE VALVE XV-500 AND XV-504. PROVIDE RESET UNDER CONTROL OF THE DREDGE OPERATOR, 0-180 SECOND (ADJUSTABLE) DELAY OVERRIDE OF PRESSURE ALARMS AVAILABLE FOR STARTING PUMP (TYP).
I 7	444853-200-D-102:	LOW PRESSURE SETPOINT PSL-202A OR PSL-202B: INITIATE EMERGENCY SHUT DOWN SEQUENCE OF PIPELINE PUMPS DP-1, P-1, P-2, P-3, AND P-4 AND CLOSE VALVES.
I 8	444853-200-D-103:	LOW PRESSURE SETPOINT PSL-302A OR PSL-302B: INITIATE EMERGENCY SHUT DOWN SEQUENCE OF PIPELINE PUMPS DP-1, P-1, P-2, P-3, AND P-4 AND CLOSE VALVES.
I 9	444853-200-D-104:	LOW PRESSURE SETPOINT PSL-402A OR PSL-402B: INITIATE EMERGENCY SHUT DOWN SEQUENCE OF PIPELINE PUMPS DP-1, P-1, P-2, P-3, AND P-4 AND CLOSE VALVES.
I 10	444853-200-D-105:	LOW PRESSURE SETPOINT PSL-502A OR PSL-502B: INITIATE EMERGENCY SHUT DOWN SEQUENCE OF PIPELINE PUMPS DP-1, P-1, P-2, P-3, AND P-4 AND CLOSE VALVES.
I 11		(NOT USED)
I 12	444853-200-D-102: 444853-200-D-103: 444853-200-D-104: 444853-200-D-105:	BOOSTER PUMP STATION'S CONTAINMENT HIGH LEVEL LAH-320, LAH-321, LAH-420, LAH-421, LAH-520 OR LAH-521 ACTIVATION; INITIATE EMEREGENCY SEQUENCE SHUT DOWN OF PIPE LINE PUMPS DP-1, P-1, P-2, P-3 AND P-4. RETURN TO NORMAL OPERATION WILL BE UNDER CONTROL OF THE DREDGE OPERATOR.
I 13	444853-200-D-106:	EITHER SCREEN TANK HIGH LEVEL LAH-606 OR LAH-615 ACTIVATION; CLOSE VALVES XV-619 AND XV-620. RETURN TO NORMAL OPERATION WILL BE UNDER CONTROL OF THE SCA OPERATOR.
I 14	444853-200-D-107: 444853-200-D-106:	WHEN ALL THREE GEOTUBE FEED PUMPS P-7, P-8 AND P-9 SHUT DOWN AT SAME TIME; CLOSE VALVES XV-619 AND XV-620. RETURN TO NORMAL OPERATION WILL BE UNDER CONTROL OF THE SCA OPERATOR.
I 15	44853-200-D-111:	HIGH LEVEL IN WEST BASIN SUMP LAH-1105; LOCK OUT INFLOW FROM WEST BASIN SUMP PUMPS P-31A, P-31B, P-31C AND P-31D.
I 16	444853-200-D-112: 444853-200-D-111:	HIGH LEVEL IN EAST BASIN SUMP LAH-1205; SHUTDOWN INFLOW FROM WEST BASIN TRANSFER PUMPS P-11 AND P-12; ALSO, LOCK OUT INFLOW FROM BASIN 2 SUMP PUMPS P-32A, P-32B, P-32C AND P-32D.
I 17	444853-200-D-107:	LOW LOW LEVEL ALARM LALL-710; LOCK OUT PUMPS P-39 AND P-40.
I 18	444853-200-D-107:	HIGH HIGH LEVEL ALARM LAHH-710 ON SEAL WATER STORAGE TANK; LOCK OUT PUMP P-33.
I 19	444853-200-D-113: 444853-200-D-112:	HIGH LEVEL LAH-1301 IN MAKE-UP WATER STORAGE TANK T-11; LOCK OUT WATER TREATMENT PLANT PUMP P-35.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	7/29/11	JTS	DDS	TCD

DRAWN BY: JTS	DATE: 7/29/11	SEAL
CHECKED BY: DDS	DATE: 7/29/11	
APPROVED BY: TCD	DATE: 7/29/11	
PROJECT MGR.: PEB	DATE: 7/29/11	

STATE OF NEW YORK · MARK T. OTTEN · 081376 · LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP
OFFICE: 301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB: 444853
WBS: 04620

PROJECT TITLE:
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE:
SLURRY TRANSPORT SYSTEM P&ID
SCHEDULE OF
INTERLOCK DESCRIPTIONS

SCALE: NO SCALE

DRAWING NO.: 444853-200-D-114 REV.: 0

ELECTRICAL LEGEND

ONE-LINE DIAGRAM SYMBOL LEGEND

SYMBOL	DESCRIPTION
400AF/300AT	CIRCUIT BREAKER, 400AF INDICATES FRAME SIZE IN AMPERES, 300AT INDICATES TRIP SETTING IN AMPERES
	GROUND CONNECTION
1000AT LSIG	CIRCUIT BREAKER W/ LONG TIME, SHORT TIME, INSTANTANEOUS AND GROUND FAULT TRIP.
	ENCLOSED ELECTRICALLY OPERATED CONTACTOR COIL, VOLTAGE AS INDICATED. THREE POLE UNLESS NOTED OTHERWISE. WP-NEMA 3R
R	RELAY
R	RED RUN LIGHT LOCATED IN MCC STARTER COVER
K1	KIRK KEY INTERLOCKING
15A	MOLDED CASE CIRCUIT BREAKER, THERMAL TRIP, 3-POLE, UNLESS OTHERWISE NOTED, 15A INDICATES TRIP IN AMPERES.
100AS/60AF	FUSED DISCONNECT SWITCH, 100AS INDICATES FUSE CLIP SIZE IN AMPERES, 60AF INDICATES FUSE RATING IN AMPERES
	NON-FUSED HORSEPOWER RATED DISCONNECT SWITCH
M	ELECTRIC MOTOR - "M" INDICATES MOTOR NAMEPLATE RATED HORSEPOWER SEE ONE LINE DIAGRAM FOR MOTOR HORSEPOWER RATING
JB	NEMA-3R JUNCTION BOX
HOA	HAND / OFF / AUTO SELECTOR SWITCH
	LOAD BREAK SWITCH, NON-FUSED
	LOAD BREAK SWITCH, FUSED
	MEDIUM VOLTAGE LOAD BREAK SWITCH, FUSED
	MEDIUM VOLTAGE LOAD BREAK SWITCH
	FUSED CUTOUT
	PAD MOUNTED TRANSFORMER, Y =WYE, △=DELTA 3-PHASE CONNECTION
	POLE MOUNTED TRANSFORMER
PT CT	PT=POTENTIAL TRANSFORMER (VOLTS), CT=CURRENT TRANSFORMER (AMPS)
LA	LIGHTNING ARRESTER
Ø	POLE FOR OVERHEAD DISTRIBUTION

POWER DISTRIBUTION EQUIPMENT

SYMBOL	DESCRIPTION
WP	POWER EQUIPMENT NOMENCLATURE (TYPICAL FOR ALL EQUIPMENT TYPES): "WP" - INDICATES EQUIPMENT ENCLOSURE TO BE NEMA 3R "XP1"- INDICATES EXPLOSION PROOF, CLASS - 1, DIVISION - 1, GROUPS C & D "XP2"- INDICATES EXPLOSION PROOF, CLASS - 1, DIVISION - 2, GROUPS C & D
	CIRCUIT BREAKER TYPE PANELBOARD 480/277V, 3ø, 4W SURFACE MOUNTED SEE ONE LINE DIAGRAM FOR SIZE AND RATING
	CIRCUIT BREAKER TYPE PANELBOARD 208/120V, 3ø, 4W FLUSH MOUNTED SEE PANEL SCHEDULE FOR SIZE AND RATING
	CIRCUIT BREAKER TYPE PANELBOARD 208/120V, 3ø, 4W SURFACE MOUNTED SEE PANEL SCHEDULE FOR SIZE AND RATING
	DISTRIBUTION PANEL - SEE ONE LINE DIAGRAM FOR SIZE AND RATINGS SEE ONE LINE DIAGRAM FOR SIZE AND RATING
T	TRANSFORMER TYPE / SIZE AS INDICATED ON ONE LINE DIAGRAM
M	ELECTRIC MOTOR - "M" INDICATES MOTOR NAMEPLATE RATED HORSEPOWER SEE ONE LINE DIAGRAM FOR MOTOR HORSEPOWER RATING
WP	NON-FUSED HORSE POWER RATED DISCONNECT SWITCH, 3 POLE, 30 AMP, HEAVY DUTY TYPE NEMA 1 ENCLOSURE "WP" - NEMA 3R ENCLOSURE, "XP" - NEMA 7/9 ENCLOSURE EXPLOSION-PROOF "4X" - NEMA 4X STAINLESS STEEL ENCLOSURE, S1-NEMA SIZE 1
XP	FUSED DISCONNECT SWITCH, 3 POLE, 30 AMP, HEAVY DUTY TYPE NEMA 1 ENCLOSURE "WP" - NEMA 3R ENCLOSURE, "XP" - NEMA 7/9 ENCLOSURE EXPLOSION-PROOF "4X" - NEMA 4X STAINLESS STEEL ENCLOSURE, S1-NEMA SIZE 1
	MOTOR STARTER - SIZE 1 IN NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED
	COMBINATION MOTOR STARTER/FUSED DISCONNECT SWITCH, SIZE 1 IN NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED
JB	JUNCTION BOX, SIZE AS REQUIRED PER LOCAL AND NATIONAL ELECTRICAL CODE
JB	JUNCTION BOX, SIZE AS REQUIRED PER LOCAL AND NATIONAL ELECTRICAL CODE, WITH CONNECTION TO UNIT
PB	PULL BOX, SIZE AS REQUIRED PER LOCAL AND NATIONAL ELECTRICAL CODE
	FLEXIBLE CORD AND PLUG - NEMA 5-20R WITH WEATHERPROOF BOOT AND COVER

RECEPTACLES

SYMBOL	DESCRIPTION
AC	RECEPTACLE NOMENCLATURE (TYPICAL FOR ALL RECEPTACLE TYPES): "AC" - INDICATES RECEPTACLE MOUNTED 6" ABOVE COUNTER "D" - INDICATES RECEPTACLE CONNECTED TO DEDICATED CIRCUIT "E" - INDICATES RECEPTACLE CONNECTED TO EMERGENCY CIRCUIT "GFI" - INDICATES GROUND FAULT CIRCUIT INTERUPTER RECEPTACLE "WP" - INDICATES DEVICE BOX AND COVER TO BE WEATHERPROOF "XP1"- INDICATES EXPLOSION PROOF, CLASS - 1, DIVISION - 1, GROUPS C & D "XP2"- INDICATES EXPLOSION PROOF, CLASS - 1, DIVISION - 2, GROUPS C & D
	120V, 20A, DUPLEX RECEPTACLE WITH DEVICE BOX AND COVER
	120V, 20A, DOUBLE DUPLEX RECEPTACLE WITH DEVICE BOX AND COVER
	120V, 20A, SINGLE RECEPTACLE WITH DEVICE BOX AND COVER
1	SPECIAL PURPOSE OUTLET WITH DEVICE BOX AND COVER, SEE PLAN DRAWING FOR TYPE : "1" 30AMP 120V RECEPTACLE "2" 20AMP 208V RECEPTACLE 1 PHASE "3" 20AMP 208V RECEPTACLE 3 PHASE "4" 30AMP 208V RECEPTACLE 1 PHASE "5" 30AMP 208V RECEPTACLE 3 PHASE

LIGHTING

SYMBOL	DESCRIPTION
A 1 a	LIGHTING FIXTURE NOMENCLATURE (TYPICAL FOR ALL FIXTURE SYMBOLS): CAPITAL LETTER - INDICATES FIXTURE TYPE PER LIGHTING FIXTURE SCHEDULE NUMERAL - INDICATES CIRCUIT NUMBER LOWER CASE LETTER - INDICATES ASSOCIATED SWITCH CONTROL IF PRESENT
	SITE POLE LIGHTING FIXTURE (SINGLE HEAD)

SWITCHES

SYMBOL	DESCRIPTION
S_a	SWITCH NOMENCLATURE (TYPICAL FOR ALL SWITCH TYPES): "a" - INDICATES ASSOCIATED LIGHTING FIXTURE CONTROLLED BY SWITCH "WP" - INDICATES DEVICE BOX AND COVER TO BE NEMA 3R "XP1"- INDICATES EXPLOSION PROOF, CLASS - 1, DIVISION - 1 "XP2"- INDICATES EXPLOSION PROOF, CLASS - 1, DIVISION - 2
S_a	SINGLE POLE SWITCH, 20A, WITH DEVICE BOX AND COVER
S_2	TWO POLE SWITCH, 20A WITH DEVICE BOX AND COVER
S_3	THREE WAY SWITCH, 20A WITH DEVICE BOX AND COVER

GROUNDING

SYMBOL	DESCRIPTION
— G —	GROUND CONDUCTOR #4/0 BARE COPPERPS
	GROUND BUS
	GROUND ROD
	GROUND WELL
	GROUND CONNECTION EXOTHERMIC WELD OR APPROVED COMPRESSION CONNECTION
	GROUND CONNECTION BOLTED TO COLUMN OR EQUIPMENT
	LIGHTINING PROTECTION AIR TERMINAL
— L —	LIGHTINING PROTECTION CABLE. SEE DETAIL FOR SIZE

INSTRUMENTATION

SYMBOL	DESCRIPTION
1234 HS 001	INSTRUMENT FIELD DEVICE, "1234-HS-001" INDICATES INSTRUMENT NUMBER FROM PROJECT INSTRUMENT LIST. " ○ " INDICATES INSTRUMENT WIRING TYPE FROM LIST BELOW
○	ANALOG FIELD DEVICE WITH 4-20MA FIELD WIRING
	DISCRETE FIELD DEVICE WITH DC FIELD WIRING
⊗	FIELD DEVICE WITH INTRINSICALLY SAFE WIRING
◑	ANALOG/DISCRETE FIELD DEVICE (UNSHIELDED & SHIELDED)
⊖	FIELD DEVICE WITH 120 VAC WIRING
Ⓔ	SYSTEM EMERGENCY STOP PUSHBUTTON

MISCELLANEOUS

SYMBOL	DESCRIPTION
EMH	ELECTRIC MAN HOLE, SIZE PER LOCAL AND NATIONAL ELECTRICAL CODE
HH EHH	ELECTRIC HAND HOLE, SIZE PER LOCAL AND NATIONAL ELECTRICAL CODE
CHH	COMMUNICATIONS HAND HOLE, SIZE PER LOCAL AND NATIONAL ELECTRICAL CODE
— OH —	OVERHEAD ELECTRIC POWER LINES
Ø	WOODEN POWER POLE, HEIGHT AND CLASS AS NOTED
— UG —	UNDERGROUND DUCT BANK, CONCRETE ENCASED, REINFORCED UNDER ROADWAYS
- - - UG - - -	UNDERGROUND CONDUITS, SOIL BACKFILL
- - - G - - -	UNDERGROUND DIRECT BURIED GROUND CONDUCTOR, 4/0 UNLESS OTHERWISE NOTED

ABBREVIATIONS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
A	AMPERES	JB	JUNCTION BOX
AFF	ABOVE FINISH FLOOR	KVA	KILOVOLT AMPERES
AFG	ABOVE FINISH GRADE	KW	KILOWATTS
AL	ALUMINUM	LTG.	LIGHTING
ARCH	ARCHITECT	MCB	MAIN CIRCUIT BREAKER
ATS	AUTOMATIC TRANSFER SWITCH	MCC	MOTOR CONTROL CENTER
AWG	AMERICAN WIRE GUAGE	MLO	MAIN LUGS ONLY
BLDG	BUILDING	MTD.	MOUNTED
C	CONDUIT - RACEWAY	MTG.	MOUNTING
CAT	CATALOG	MISC	MISCELLANEOUS
CKT	CIRCUIT	NIC	NOT IN CONTRACT
℄	CENTER LINE	NTS	NOT TO SCALE
COL	COLUMN	No. (#)	NUMBER
CU	COPPER	PC	PLUMBING CONTRACTOR
C/B	CIRCUIT BREAKER	PNL	PANEL OR PANELBOARD
DWG	DRAWING	PTW	PRESSURE TREATED LUMBER
EC	ELECTRICAL CONTRACTOR	PWR	POWER
E.M.H.	ELECTRIC MANHOLE	PVC	POLYVINYL CHLORIDE
EMT	ELECTRIC METALLIC TUBING	REQ'D	REQUIRED
ERL	EXISTING IN RELOCATED LOCATION	SP	SPARE
ETR	EXISTING TO REMAIN	SW	SWITCH
ETBR	EXISTING TO BE REMOVED	SWBD	SWITCHBOARD
ETBRL	EXISTING TO BE RELOCATED	SN	SOLID NEUTRAL
EWC	ELECTRIC WATER COOLER	TELE	TELEPHONE
F&I	FURNISHED AND INSTALLED	TYP.	TYPICAL
FT	FEET	UON	UNLESS OTHERWISE NOTED
GC	GENERAL CONTRACTOR	V	VOLT
GFI	GROUND FAULT INTERRUPTER	VFD	VARIABLE FREQUENCY DRIVE
G OR GND	GROUND OR GROUNDING	W	WIRE
HOA	HAND/OFF/AUTO SWITCH	W/E	FURNISHED WITH EQUIPMENT
HVAC	HEAT, VENT, AIR COND.	WP	WEATHERPROOF
HP	HORSE POWER	XP	EXPLOSION-PROOF
IC	INTERRUPTING CAPACITY	XFMR	TRANSFORMER

GENERAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO DETERMINE ALL PRE-EXISTING CONDITIONS AND WORK NECESSARY PRIOR TO SUBMISSION OF THE BID PRICE.
2. THE ELECTRICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL CONTRACT DOCUMENTS, FOR ALL TRADES, MAKE ALL EQUIPMENT CONNECTIONS AND COORDINATE WITH OTHER CONTRACTORS.
3. DRAWINGS ARE DIAGRAMMATIC ONLY; EXACT LOCATIONS, MOUNTING HEIGHTS OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED WITH THE EQUIPMENT REQUIREMENTS AND FIELD CONDITIONS.
4. THE ELECTRICAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE, BUT NOT BE LIMITED TO ALL ELECTRICAL POWER, LIGHTING, GROUNDING AND CONTROL REQUIREMENTS INDICATED.
5. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE ELECTRICAL WORK COMPLETE AND READY FOR OPERATION.
6. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH OSHA, THE NATIONAL ELECTRICAL CODE AND LOCAL GOVERNING AUTHORITIES.
7. WIRE SIZE INDICATED ON HOMERUNS SHALL BE CONTINUOUS THROUGH CIRCUIT.
8. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE 98 PERCENT CONDUCTIVITY, COPPER, MINIMUM #12 AWG SIZE, THWN/THHN WITH DUAL RATED 75/90 DEGREE C INSULATION, 600 VOLTS RATED, UNLESS OTHERWISE NOTED.
9. ALL FEEDER CONDUCTORS SHALL BE 98 PERCENT CONDUCTIVITY, COPPER, AWG SIZE AS NOTED, XHHW INSULATION, 600 VOLTS RATED, UNLESS OTHERWIZE NOTED.
10. A GROUNDING CONDUCTOR SHALL BE INCLUDED IN EACH RACEWAY OR CABLE, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
11. ALL SINGLE PHASE BRANCH CIRCUIT WIRING SHALL HAVE INDIVIDUAL NEUTRAL CONDUCTORS BROUGHT BACK TO THE PLACE OF ORIGIN. SHARING OF ONE NEUTRAL CONDUCTOR BETWEEN DIFFERENT SINGLE PHASE CIRCUITS IS NOT ALLOWED.
12. ALL ENCLOSURE SHALL BE NEMA 3R UNLESS NOTED OTHERWISE.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/23/11	WGS	JDA	CLL

DRAWN BY: WGS	DATE: 5/23/11	SEAL
CHECKED BY: JDA	DATE: 5/23/11	
APPROVED BY: CLL	DATE: 5/23/11	
PROJECT MGR.: DDS	DATE: 5/23/11	

STATE OF NEW YORK
CHRISTOPHER L. LYNCH
No. 077325-1
LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB: 444853
WBS: 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
ELECTRICAL
GENERAL NOTES, LEGEND
AND ABBREVIATIONS

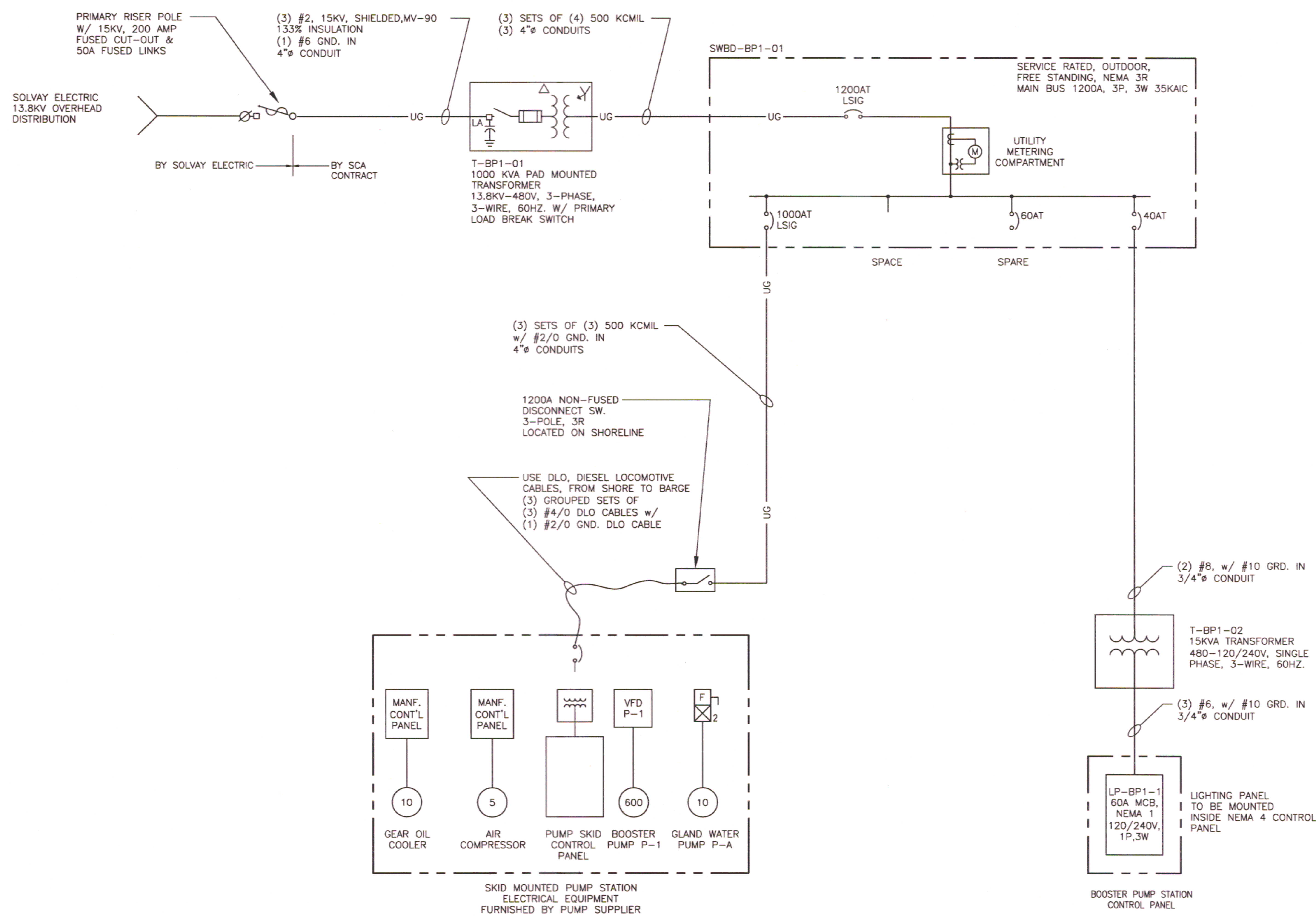
SCALE: NONE

DRAWING NO.: 444853-200-E-000
REV.: 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\ELEC\444853-200-E-000.DWG
PLOT DATE: 5/26/2011 3:22 PM PLOTTED BY: ANTOLOVICH, JASON

NOTE:

1. FOR GENERAL NOTES, LEGENDS AND ABBREVIATIONS REFER TO DRAWING 444853-200-E-000.



BOOSTER PUMP STATION 1
ELECTRICAL ONE LINE DIAGRAM
NOT TO SCALE

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPR'D
0	ISSUED FOR CONSTRUCTION	5/23/11	WGS	JDA	CLL

DRAWN BY	WGS	DATE 5/23/11
CHECKED BY	JDA	DATE 5/23/11
APPROVED BY	CLL	DATE 5/23/11
PROJECT MGR.	DDS	DATE 5/23/11

STATE OF NEW YORK CHRISTOPHER L. LYNCH 077325-1 LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853
WBS 04620

PROJECT TITLE
Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE
ELECTRICAL
ONE-LINE DIAGRAM
BOOSTER PUMP STATION 1

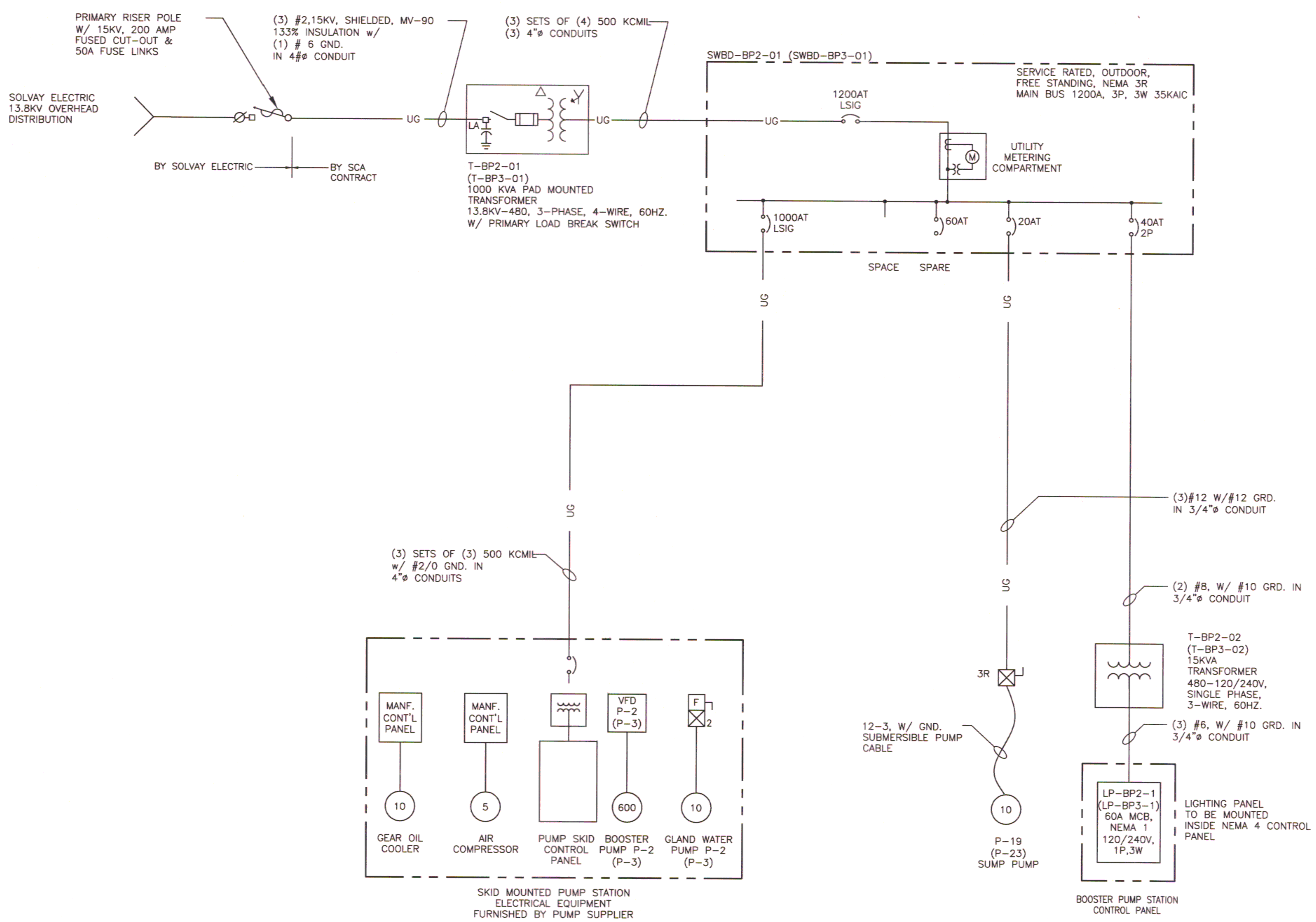
SCALE NONE

DRAWING NO. 444853-200-E-021
REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\ELEC\444853-200-E-021.DWG
PLOT DATE: 5/26/2011 2:37 PM PLOTTED BY: ANTOLOVICH, JASON

NOTE:

1. FOR GENERAL NOTES, LEGENDS AND ABBREVIATIONS REFER TO DRAWING 444853-200-E-000.



BOOSTER PUMP STATION 2 (& 3) ELECTRICAL ONE LINE DIAGRAM

NOT TO SCALE

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/23/11	WGS	JDA	CLL

DRAWN BY	WGS	DATE 5/23/11
CHECKED BY	JDA	DATE 5/23/11
APPROVED BY	CLL	DATE 5/23/11
PROJECT MGR.	DDS	DATE 5/23/11

SEAL: STATE OF NEW YORK — CHRISTOPHER L. LYNCH — 077325-1 — LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560

JOB: 444853
WBS: 04620

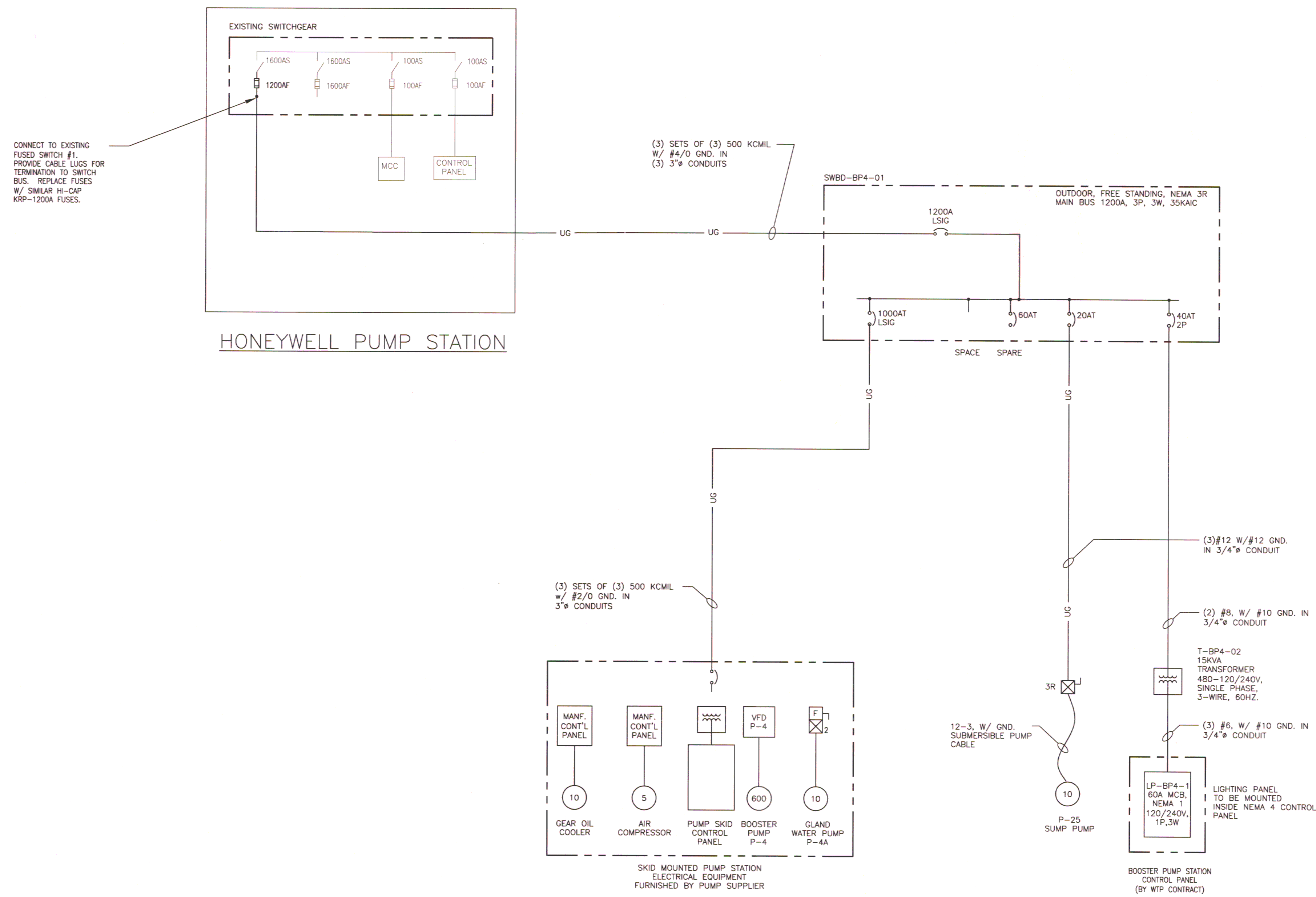
PROJECT TITLE: Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE: ELECTRICAL ONE-LINE DIAGRAM BOOSTER PUMP STATION 2 & 3

SCALE: NONE

DRAWING NO. 444853-200-E-022 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\ELEC\444853-200-E-022.DWG
PLOT DATE: 5/26/2011 2:44 PM PLOTTED BY: ANTOLOVICH, JASON



BOOSTER PUMP STATION 4
ELECTRICAL ONE LINE DIAGRAM

NOT TO SCALE

NOTE:

1. FOR GENERAL NOTES, LEGENDS AND ABBREVIATIONS REFER TO DRAWING 444853-200-E-000.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/23/11	WGS	JDA	CLL

DRAWN BY: WGS	DATE: 5/23/11
CHECKED BY: JDA	DATE: 5/23/11
APPROVED BY: CLL	DATE: 5/23/11
PROJECT MGR.: DDS	DATE: 5/23/11

STATE OF NEW YORK · CHRISTOPHER L. LYNCH · No. 077325 · LICENSED PROFESSIONAL ENGINEER

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD, SYRACUSE, NY 13212, (315) 451-9560

JOB: 444853
WBS: 04620

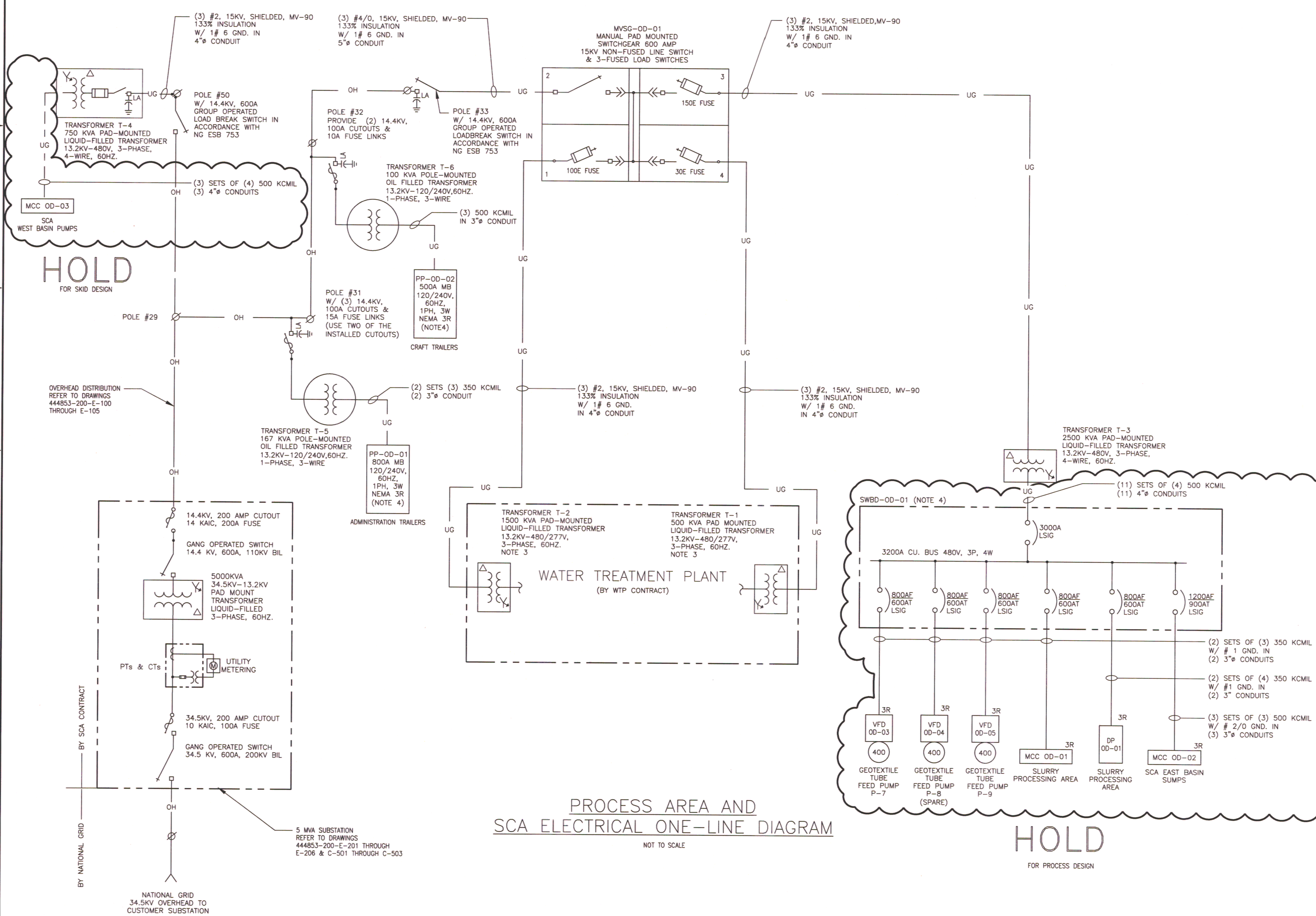
PROJECT TITLE: Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE: ELECTRICAL ONE-LINE DIAGRAM BOOSTER PUMP STATION 4

SCALE: NONE

DRAWING NO.: 444853-200-E-023 REV.: 0

NOTICE:
THIS DRAWING, THE PROPERTY OF HONEYWELL IS FURNISHED SUBJECT TO RETURN ON DEMAND AND THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DESIGN WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION WHETHER WILLFUL OR NEGLIGENT.



PROCESS AREA AND SCA ELECTRICAL ONE-LINE DIAGRAM

NOT TO SCALE

NOTE:

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS REFER TO DRAWING 444853-200-E-000.
2. FOR WATER TREATMENT PLANT (WTP) ELECTRICAL ONE-LINE REFER TO O'BRIEN & GERE WATER TREATMENT PLANT DESIGN DRAWING E-1 FILE# 1163.44523-E-5 REV. A
3. WATER TREATMENT TRANSFORMERS T-1 & T-2 TO BE FURNISHED AND INSTALLED UNDER WTP CONTRACT. SCA SUBCONTRACTORS TO PROVIDE CONCRETE PAD AND CURB, PRIMARY DUCT AND CONDUCTORS AND SECONDARY CONDUIT STUBS FOR T-1 & T-2.
4. PANELS SHALL BE SERVICE ENTRANCE RATED.

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
0	ISSUED FOR CONSTRUCTION	5/23/11	WGS	JDA	CLL

DRAWN BY: WGS	DATE: 5/23/11
CHECKED BY: JDA	DATE: 5/23/11
APPROVED BY: CLL	DATE: 5/23/11
PROJECT MGR.: DDS	DATE: 5/23/11

SEAL: STATE OF NEW YORK · CHRISTOPHER L. LYNCH · LICENSED PROFESSIONAL ENGINEER · 077325-1

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE: 301 PLAINFIELD ROAD SYRACUSE, NY 13212 (315) 451-9560
JOB: 444853
WBS: 04620

PROJECT TITLE: Honeywell ONONDAGA LAKE SEDIMENT MANAGEMENT DESIGN SYRACUSE, NEW YORK

DRAWING TITLE: ELECTRICAL ONE-LINE DIAGRAM PROCESS AREA & SCA

SCALE: NONE

DRAWING NO.: 444853-200-E-024 REV. 0

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\ELEC\444853-200-E-024.DWG
PLOT DATE: 5/26/2011 3:02 PM PLOTTED BY: ANTOLOVICH, JASON