



# SYCAMORE TRAILS AQUATIC CENTER Splash Pad

## MIAMISBURG, OH

### INTRODUCTION:

SPLASH PAD TO CONSIST OF A Ø 70'-0" CONCRETE PAD WITH THE FOLLOWING PLAY FEATURES:

NO	PRODUCT	QTY
1	FLASHFLOOD	1
2	HYDROHELIX	1
3	WATERWAY	1
4	SPRAYSTACKER	1
5	SPRAYSHROUD	2
6	JETSTREAM	3
7	AQUAGATHER STATION	1
8	WHIRLFLEX	1
9	UPWARD SPRAY RING	1
10	<del>TRIPLE ARCH JET</del>	<del>3</del>
11	STREAM JET TRIANGLE	2
12	CROWN JET	2
13	JR WATER JEWEL	2
14	MINI PILLAR	2
15	SEA CRAWLER	2

### REQUIRED UTILITIES:

- ELECTRICAL SERVICE:**  
 (1) FEED @ 230V, 1Ø, 60hz, 40amps W/ NEUTRAL (LIFT STATION PUMP)  
 (1) FEED @ 120V, 1Ø, 60hz, 15 amps (SPLASH PAD CONTROLS)

**REVISED**  
7:36 am, Dec 16, 2022

### SPLASH PAD DRAWING LIST:

- C: COVER SHEET
- 1: GENERAL INFORMATION
- 2: SITE PLAN
- 3: SPLASH PAD LAYOUT
- 4: SPLASH PAD CONCRETE PLAN
- 5: SPLASH PAD CONCRETE FORM
- 6: SPLASH PAD CONCRETE SECTION AND DETAILS
- 7: EXISTING PIPING PLAN
- 8: EXISTING FILTRATION SYSTEM DATA
- 8-1: EXISTING FILTRATION ISOMETRIC
- 9: SPLASH PAD SUPPLY PIPING PLAN
- 10: SPLASH PAD DRAIN PIPING PLAN
- 11: SPLASH PAD ELECTRICAL PLAN
- 12: SPLASH PAD MECHANICAL SCHEMATIC
- 13: SPLASH PAD MECHANICAL DETAILS

DRAINAGE SYSTEM TO CONSIST OF (3) DRAINS W/ COVERING GRATE AND REMOVABLE DEBRIS BASKET

LIFT STATION SYSTEM TO CONSIST OF:  
 - PRECAST CONCRETE MANHOLE W/ ALL REQUIRED PLUMBING AND ELECTRICAL PORTS AND LOCKABLE HATCH

- SUBMERSIBLE PUMP AND CHECK VALVE.

- PUMP FLOAT CONTROL SYSTEM

MECHANICAL SYSTEM TO BE LOCATED IN A NEARBY MECHANICAL ROOM.

SPLASH PAD WATER SOURCE TO BE FROM AN EXISTING POOL USING AN EXISTING FEATURE PUMP. SEE PROVIDED ORIGINAL POOL DRAWINGS FOR EQUIPMENT SPECIFICATIONS.



1101 McKinley Parkway Delano, MN 55328  
 Contact: Chuck Schmitz  
 952-345-6443 (Direct) - 952-345-6444 (Fax)  
 chuckschmitz@playlsi.com (Email)

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/4/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

1101 MCKINLEY PARKWAY DELANO, MN 55328 952-345-6443 952-345-6444 aquatixbylandscape.com	 <b>aquatix</b> by landscape structures
JOB TITLE SYCAMORE TRAILS AQUATIC CENTER SPLASH PAD	LOCATION MIAMISBURG, OH
CHECKED DWS: FILE 1156080-05-02-C	DATE 2/7/22
DRAWN CTS	SHEET TITLE COVER SHEET
SCALE SEE VIEWS	JOB NO. 1156080-05-02



GENERAL SPLASH PAD DATA			
<b>NOMINAL SPLASH PAD SURFACE AREA: 3,848 sq.ft.</b> <b>NOMINAL APRON SURFACE AREA: 1,179 sq.ft.</b> <b>NOMINAL TOTAL SURFACE AREA: 5,027 sq.ft.</b>			
<b>NOMINAL LIFT STATION VOLUME: 1,025 GAL.</b> <b>NOMINAL LIFT STATION PUMP FLOW RATE: 400 GPM</b> <b>TIME TO EMPTY LIFT STATION WHILE SPLASH PAD IS RUNNING: 64 MIN.</b>			
<b>NOMINAL TOTAL FEATURE FLOW: 384 GPM</b> <b>NOMINAL FEATURE FLOW RATE:</b>			
NO	PRODUCT	QTY	GPM
1	FLASHFLOOD	1	20
2	HYDROHELIX	1	30
3	WATERWAY	1	10
4	SPRAYSTACKER	1	20
5	SPRAYSHROUD	2	20 EA
6	JETSTREAM	3	5 EA
7	AQUAGATHER STATION	1	10
8	WHIRLFLEX	1	30
9	UPWARD SPRAY RING	1	110
10	<del>TRIPLE ARCH JET</del>	<del>3</del>	<del>5 EA</del>
11	STREAM JET TRIANGLE	2	15 EA
12	CROWN JET	2	5 EA
13	JR WATER JEWEL	2	7 EA
14	MINI PILLAR	2	10 EA
15	SEA CRAWLER	2	5 EA

**\*\*\* NOTE \*\*\***  
**FOR EXISTING POOL DATA (VOLUME, TURN OVER RATE, FILTRATION RATE, ETC) SEE SHEETS 7/13, 8/13, AND 8-1/13.**

### WATER QUALITY GUIDELINES

FOR PROPER SPLASH PAD OPERATION MAINTAIN, THE FOLLOWING WATER CHEMISTRY:

1. pH BALANCE: 7.2-7.8
2. FREE CHLORINE RESIDUAL: 3.0-5.0 ppm
3. TOTAL DISSOLVED SOLIDS: LESS THEN 1000ppm
4. CALCIUM HARDNESS: 200-400 1500ppm
5. TOTAL ALKALINITY: 80-180ppm AS CALCIUM CARBONATE

### SOIL EXCAVATIONS:

REMOVE ALL EXISTING FILL SOILS AND ANY SILTY SANDS (INCLUDING NATURALLY DEPOSITED SOILS). SOILS EXPOSED IN THE EXCAVATION BOTTOM SHOULD CONSIST OF NATURAL COARSE ALLUVIAL SANDS (SP OR SP-SM). SOILS EXPOSED IN THE EXCAVATION BOTTOM SHOULD BE THOROUGHLY SURFACE COMPACTED. FILL PLACED IN THE EXCAVATION SHOULD CONSIST OF NON-FROST SUSCEPTIBLE SANDS HAVING 5% OR LESS PARTICLES (BY WEIGHT) FINER THAN THE #200 SIEVE AND 40% OR LESS PARTICLES FINER THAN THE #40 SIEVE. FILL SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM: D698). REMOVE ALL BACKFILL THAT DOES NOT CONFORM TO MATERIAL SPECIFICATION (SP OR SP-SM CLASSIFICATION) OR MEET COMPACTION REQUIREMENTS. CONSULT SOILS REPORT OR TESTING LABORATORY AS NECESSARY.

### BILL OF MATERIALS:

1. (25) WATERPLAY FEATURES (SEE GENERAL SPLASH PAD DATA)
2. FILTRATION SYSTEM COMPONENTS:  
 2a) EXISTING FILTRATION SYSTEM: SEE PROVIDED ORIGINAL POOL DRAWINGS FOR FILTRATION SYSTEM COMPONENTS AND SPECIFICATIONS.
3. FEATURE SYSTEM COMPONENTS:  
 3a) EXISTING FEATURE SUPPLY SYSTEM: SEE PROVIDED ORIGINAL POOL DRAWINGS (SHEET PL4.0) FOR FEATURE SYSTEM COMPONENTS AND SPECIFICATIONS.
4. LIFT STATION COMPONENTS:  
 4a) (1) UNDERGROUND MANHOLE - PRECAST CONCRETE MANHOLE LOCKABLE HATCH AND LADDER (1,025 GAL CAPACITY) SEE SHEET 13/14.  
 \*\*\*MAN HOLE TO BE PREPLUMBED AND OUTFITTED\*\*\*  
 4b) (1) SUBMERSIBLE PUMP - HYDROMATIC SUBMERSIBLE PUMP, 5HP/230V,29.5 AMPS, W/ J-BOX FOR ELECTRICAL CONDUIT, MODEL # S4S  
 4c) (1) PUMP FLOAT CONTROL SYSTEM - TWO CUSTOM SUBMERSIBLE J-BOXES WITH FLOAT SWITCHES.  
 4d) (1) LIFT STATION CONTROL PANEL - CUSTOM CONTROL PANEL WITH MOTOR STARTER AND OVERLOAD FOR SUBMERSIBLE PUMP AND INPUTS FOR PUMP FLOAT CONTROL SYSTEM. PANEL TO BE LOCATED IN EXISTING POOL MECHANICAL ROOM.
5. MISC. COMPONENTS:  
 5d) (3) DRAINAGE BOX - ø12" PLASTIC SUMP W/ A PLASTIC GRATE TOP, AND REMOVABLE DEBRIS STRAINER BASKET. EACH DRAINAGE BOX HAS A NOMINAL CAPACITY OF 130 GPM. EACH.

### GENERAL SPLASH PAD NOTES:

1. INSTALLER SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS. ANY CHANGES OR REVISIONS TO THE DRAWINGS AFTER THE DRAWINGS HAVE BEEN APPROVED IS THE RESPONSIBILITY OF THE INSTALLING PARTY.
2. IT IS THE INSTALLERS RESPONSIBILITY TO LOCATE ALL UTILITIES AND ALL OTHER FACILITIES ABOVE AND BELOW GRADE PRIOR TO PERFORMING ANY WORK.
3. DURING THE COURSE OF CONSTRUCTION, THE INSTALLER SHALL MAINTAIN AN ACCURATE RECORD OF ALL ELEVATIONS AND CHANGES OF THE APPROVED WORK AND DOCUMENT THE ACTUAL INSTALLATION ON A SET OF REPRODUCIBLE DRAWINGS.
4. IT IS RECOMMENDED THAT A LIGHTENING DETECTION DEVICE BE INSTALLED INTO THE SPLASH PAD SYSTEM.
5. IT IS RECOMMENDED THAT A VALIDATED UV SYSTEM BE INSTALLED INTO THE SPLASH PAD SYSTEM.
6. THE BACKFLOW PREVENTER ON THE WATER MAKE-UP LINE SHALL INCLUDE A PRESSURE REDUCING VALVE AND PRESSURE GAUGE. THE INSTALLER MUST SET THE INCOMING COLD WATER LINE PRESSURE BELOW 30 PSI BEFORE INITIAL SPLASH PAD START-UP.
7. ALL COMPONENTS OF THE FILTRATION AND RECIRCULATION SYSTEM MUST BE NSF APPROVED.
8. ELEVATIONS AND CENTER LINES ARE FOR REFERENCE PURPOSES ONLY. IT IS THE INSTALLERS RESPONSIBILITY TO DETERMINE AND VERIFY ACTUAL CENTER LINES, LOCATIONS, AND ELEVATIONS.
9. ALL MECHANICAL INSTALLATION WORK SHALL BE COMPLETED IN A WORKMAN LIKE MANNER ACCORDING TO STANDARD INDUSTRY PRACTICE AND WARRANTED.
10. EQUIPMENT SUPPLIER SHALL WARRANTY ALL PRODUCTS AGAINST DEFECTS IN WORKMANSHIP FOR A PERIOD OF TWELVE (12) MONTHS FROM DATE OF INSTALLATION.
11. IF PRODUCT AND ASSOCIATED MECHANICAL SYSTEM (SUPPLY LINE, DRAIN LINE, HEADER, PUMP, FILTER, ETC.) REQUIRES WINTERIZATION, IT IS TO BE PERFORMED BY EITHER A QUALIFIED CONTRACTOR OR QUALIFIED MAINTENANCE PERSONNEL TRAINED IN PROPER WINTERIZATION PROCEDURES.
12. THERE MUST BE NO DIRECT PHYSICAL CONNECTION BETWEEN THE SEWER SYSTEM AND ANY DRAIN FROM THE SPLASH PAD OR RECIRCULATION SYSTEM.
13. SIGNAGE MUST BE PROVIDED IN ACCORDANCE WITH LOCAL AND STATE USER SANITATION AND SAFETY CODES.
14. THE OWNER IS RESPONSIBLE FOR DESIGNATING A PERSON TO OPERATE AND MAINTAIN THE SPLASH PAD AND ALL RELATED FACILITIES AND EQUIPMENT IN ACCORDANCE WITH LOCAL AND STATE OPERATION AND MAINTENANCE CODES.
15. A RECORD OF THE SPLASH PAD'S OPERATION AND ROUTINE MAINTENANCE MUST BE KEPT BY THE DESIGNATED OPERATOR IN ACCORDANCE WITH LOCAL AND STATE CODES.
16. TOILETS, SHOWERS, DRINKING FOUNTAINS, AND DRESSING ROOMS MUST BE CONVENIENTLY AVAILABLE TO POOL PATRONS IN ACCORDANCE WITH LOCAL AND STATE CODES.

### PLUMBING NOTES:

1. PIPING IS DRAWN FOR CLARITY AND DOES NOT NECESSARILY INDICATE EXACT ROUTING. CONTRACTOR SHALL INSTALL PIPING WITH AS FEW CHANGES IN DIRECTION AND ELEVATION AS JOB SITE CONDITIONS WILL ALLOW.
2. ALL PIPE AND FITTINGS MUST BE SCH 80 PVC. INSTALLER RESPONSIBLE FOR ALL PIPE, PIPE FITTINGS, FLANGES, GASKETS, ELBOWS, AND HARDWARE TO CONNECT ALL EQUIPMENT TO OPERATE PROPERLY.
3. MINIMIZE THE USE OF 90°ELBOWS ON PUMP SUCTION LINES. MAINTAIN 10 TIMES PIPE DIAMETER OF STRAIGHT PIPE ON PUMP SUCTION LINE BEFORE PUMP.
4. ALL NON-DRAIN PIPING MUST BE PRESSURE TESTED PRIOR TO BACKFILLING. WATER TESTING LINES AT 30 PSI FOR (1) HOUR WITH NO PRESSURE DROP IS THE PREFERRED METHOD OF TESTING. ISOLATE ALL PIPING APPURTENANCES FROM THE PRESSURE OF THIS TEST, AS THEY ARE NOT DESIGNED FOR HIGH PRESSURE OPERATION AND DAMAGE MAY OCCUR. ALL TEST FAILURES SHALL BE CORRECTED.
5. **\*\*WARNING:** NOT INTENDED FOR USE WITH COMPRESSED AIR OR GAS. THIS PRODUCT IS ONLY TO BE USED FOR ITS INTENDED PURPOSE.\*\*
5. ALL DISCHARGE, SUCTION, AND DRAIN LINES MUST HAVE A MEANS FOR DRAINAGE SUPPLIED BY THE GENERAL CONTRACTOR FOR WINTERIZATION.
6. SUCTION LINE VELOCITY NOT TO EXCEED 6 FT/SEC.
7. SUPPLY LINE VELOCITY NOT TO EXCEED 8 FT/SEC.
8. GRAVITY DRAIN LINE VELOCITY NOT TO EXCEED 3.0 FT/SEC.
9. DRAINAGE GRATING VELOCITY NOT TO EXCEED 1.5 FT/SEC.
10. PROVIDE ALL PIPE AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURE RECOMMENDATIONS AND APPLICABLE CODES AND REGULATIONS.
11. SUPPORT ALL PIPE LINES INDIVIDUALLY, EACH BRANCH HAVING AT LEAST ONE HANGER. IF NOT SPECIFICALLY NOTED, PROVIDE VERTICAL AND LATERAL SUPPORT FOR ALL PIPING AND EQUIPMENT.
12. PIPE SHALL BE INDEPENDENTLY SUPPORTED OF ALL PUMPS AND EQUIPMENT.
13. PROTECT PLASTIC PIPE IN STEEL SUPPORT BRACKETS.
14. SIZE HANGERS PROPERLY TO FIT AROUND PIPES AND SIZE HANGER RODS, SCREWS, BOLTS, NUTS, ETC. ACCORDING TO MANUFACTURES SIZING CHARTS.
15. SPACE HANGERS FOR HORIZONTAL PIPES AT MAXIMUM 4FT FOR 1" PIPE AND UNDER, 5FT FOR 2" UNDER, 7FT FOR 4" UNDER, 9FT FOR 6" UNDER, 10FT FOR 8" UNDER, 11FT FOR 10" UNDER AND 12FT FOR 12" OR LARGER.
16. DO NOT USE WIRE OR OTHER MAKESHIFT DEVICES FOR HANGERS OR SUPPORT.

### CONCRETE NOTES:

#### CAST IN PLACE CONCRETE NOTES:

1. DESIGN CODE: ACI 318 LATEST EDITION.
2. VERIFY LOCAL/STATE CODES FOR TYPE, THICKNESS, & REINFORCEMENT REQUIREMENTS FOR CONCRETE SLAB.
3. MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS:  
 TYPE STRENGTH LOCATION  
 A Fc'=3,000PSI FOOTINGS  
 B Fc'=4,000PSI POOL SLABS,  
 WALL, AND EXTERIOR CONCRETE EXPOSED TO FREEZING TEMPS W/5% TO 7% AIR ENTRAINMENT.
4. REINFORCING STEEL:  
 4a) DEFORMED BARS-ASTM A615 GRADE 60KSI.
5. PLACE ALL ITEMS PER APPROVED SHOP DWGS. AND APPROVED CONCRETE MIX DESIGNS.
6. PROVIDE CONCRETE COVER PER ACI 318.
7. ALL CONCRETE SURFACES TO HAVE A MEDIUM BROOM FINISH.

#### GENERAL FOUNDATION AND CAST IN PLACE CONCRETE NOTES:

1. DESIGN CODES ACI 318 AND "ACI DETAILING MANUAL". LATEST EDITION.
2. ALL FOOTINGS ARE CENTERED UNDER WALLS ABOVE, U.N.O.
3. ALL FOOTING ELEVATIONS SHOWN ARE TO TOP OF FOOTING.
4. PROVIDE ALL ACCESSORIES AND SUPPORTS NECESSARY TO SECURE REINFORCING STEEL PER "ACI DETAILING MANUAL" NO OTHER METHODS OR MATERIALS WILL BE ACCEPTABLE.
5. PROVIDE PLASTIC CHAIRS AND BAR SUPPORTS IN ALL AREAS OF EXPOSED CONCRETE.
6. PROVIDE CONCRETE PROTECTION FOR ALL REINFORCEMENT AS PER ACI 318, SECTION 7.7 REQUIREMENTS FOR CAST IN PLACE CONCRETE:
- 6a) CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
- 6b) CONCRETE EXPOSED TO EARTH OR WEATHER:  
 #5 BARS AND SMALLER: 1½"  
 #6 BARS AND LARGER: 2"
- 6c) CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, AND JOISTS (#3 TO #11 BARS): ¾" BEAMS, GIRDERS AND COLUMNS, PRIMARY REINFORCEMENT, TIES, STIRRUPS OR SPIRALS: 1½"
7. CROSS REFERENCE ARCH. AND STRUCTURAL DWGS. TO ENSURE CORRECT LOCATIONS AND PLACEMENT OF ALL ANCHOR BOLTS, INSERTS, ETC.
8. CAST DOWELS IN FTG. FOR CONCRETE WALLS ABOVE. DOWELS TO BE SAME QTY. SIZE AND SPA. AS THE VERT. WALL REINFORCEMENT. DOWELS ARE TO PROJECT FROM FTGS. TO PROVIDE THE LAP SPLICES INDICATED BELOW, U.N.O. PROVIDE 90° STANDARD HOOK IN FREE STANDING WALL FTG. DOWELS. WALL FTG. DOWELS ARE STRAIGHT, U.N.O.
9. ALL HORIZONTAL REINFORCING BARS AT OUTSIDE FACE OF WALLS SHALL BE BENT AT WALL CORNERS OR AT INTERSECTING WALLS AND SHALL LAP TO INTERSECTING REINFORCING AS INDICATED BELOW. SEPARATE BENT BAR DOWELS OF THE SAME SIZE AND SPA. AS THE HORIZONTAL WALL REINFORCING AND LAPPED AS INDICATED BELOW MAY BE USED INSTEAD.
10. LAP SPLICES AT ALL REINFORCING IN ALL CAST IN PLACE CONCRETE SHALL BE AS FOLLOW, U.N.O.  
 #4 BAR=24" #7 BAR=42"  
 #5 BAR=30" #8 BAR=48"  
 #6 BAR=36" #9 BAR=54"
11. UNLESS NOTED OTHERWISE ON DWGS. PROVIDE ADDITIONAL REINFORCING ALL AROUND CONCRETE WALL AND SLAB OPENINGS EQUAL TO THE INTERRUPTED REINFORCING IN EACH DIRECTION AND EACH FACE MIN. ONE (1) BAR ALL AROUND FOR EACH LAYER OF REINFORCING). EXTEND BARS BEYOND EDGE OF OPENINGS EQUAL TO LAP LENGTH INDICATED ABOVE. ADD ONE (1) #4x4'-0" DIAG. BAR CENTERED ON EACH CORNER (ONE (1) PER EACH LAYER OF REINFORCEMENT).
12. EXPANSION JOINT TO BE EVERY 20' x 20'.
13. SAW CUT JOINT TO BE EVERY 10' x 10'.
14. ALL CONCRETE SURFACES TO HAVE A MEDIUM BROOM FINISH.

### ELECTRICAL NOTES:

1. CONTROL PANELS  
 1a) A CLASS "A" GROUND FAULT CIRCUIT INTERRUPTER MUST BE INSTALLED IN ALL BRANCH CIRCUITS SUPPLYING EQUIPMENT IN THE EQUIPMENT ROOM.  
 1b) THE NATIONAL ELECTRICAL CODE REQUIRES CLEAR SPACE AROUND INSTALLED ELECTRICAL PANELS FOR SAFETY AND MAINTENANCE. THE INSTALLER SHALL VERIFY THAT EACH PANEL INSTALLATION IS COMPLIANT WITH THE N.E.C. AND LOCAL ELECTRICAL CODES.
2. BONDING  
 2a) ALL METALLIC PIPING AND CONDUIT SYSTEMS ASSOCIATED WITH THE SPLASH PAD MUST BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR OF THE BRANCH CIRCUIT SUPPLYING ELECTRICAL POWER TO THE SPLASH PAD.  
 2b) ALL STAINLESS STEEL STRUCTURES REQUIRE BONDING PER NEC AND LOCAL CODES.  
 2c) ALL REQUIRED BONDING TO BE APPROVED BY LOCAL JURISDICTION INSPECTOR PRIOR TO PLACING CONCRETE.
3. GROUNDING  
 3a) THE FOLLOWING EQUIPMENT MUST BE GROUNDED:  
 -ALL ELECTRICAL EQUIPMENT IN THE SPLASH PAD.  
 -ALL ELECTRICAL RECIRCULATING SYSTEM EQUIPMENT.  
 -ALL PANELBOARDS THAT SUPPLY ANY ELECTRICAL EQUIPMENT ASSOCIATED WITH THE SPLASH PAD.
4. CONDUITS  
 4a) THE CONDUIT SYSTEM MUST BE WATERTIGHT FROM THE CONTROL PANEL TO THE WATER FEATURE/POOLS. PRESSURE TEST CONDUIT WITH 5 PSI (MIN.) TO 15 PSI (MAX.), VERIFY WITH APPLICABLE CODES, FOR 30 MINUTES WITHOUT ANY PRESSURE DROP. IF REQUIRED REPAIR ANY LEAKS AND RE-TEST.  
 4b) ALL CONDUITS EXPOSED TO MOISTURE MUST BE OF A CORROSION RESISTANT MATERIAL SUCH AS RED BRASS.
5. ALL ELECTRICAL WORK SHALL COMPLY WITH THE NFPA 70, NATIONAL ELECTRICAL CODE 2008 EDITION THAT IS INCORPORATED BY REFERENCE.

### STORAGE TANK INSTALL INSTRUCTIONS:

1. SITE CONDITIONS: THE SITE MUST BE ACCESSIBLE TO LARGE, HEAVY TRUCKS. FREE OF ITEMS LIKE TREES, OVERHEAD WIRES, AND BUILDINGS. THAT COULD INTERFERE WITH DELIVERY OR INSTALLATION AND ALLOWS TRUCKS TO WITHIN 3 TO 8 FEET OF PLACEMENT EXCAVATION.
2. EXCAVATION: EXCAVATION SHOULD BE APPROXIMATELY 18" MINIMUM LARGER THAN TANK SIZE TO ALLOW FOR ADEQUATE BACK FILL. THIS MAY VARY WITH SOIL CONDITIONS. EXCAVATION BELOW THE TANK CENTER TO BE 2" LOWER TO PREVENT UNDUE PRESSURE AT CENTER OF TANK.
3. BEDDING: PROPER USE OF BEDDING MATERIAL IS IMPORTANT TO ENSURE SERVICE LIFE OF TANK STRUCTURE. BEDDING MUST BE CAPABLE OF BEARING THE WEIGHT OF THE TANK AND CONTENTS. BEDDING MATERIAL SHALL HAVE THE ABILITY OF 100% TO BE ABLE TO PASS THROUGH A ½" SCREEN MADE UP OF SAND OR GRAVEL (CLEAN PEA STONE PREFERRED). BEDDING THICKNESS SHALL BE A 4" MINIMUM COMPACTED (THICKNESS MAY VARY WITH EXISTING SOIL CONDITIONS). THE CENTER BEDDING UNDER THE TANK SHOULD BE 1" LOWER THEN THE PERIMETER BEDDING.
4. WATER TABLE: TANKS BEING PLACED WHERE WATER LEVELS CAN POTENTIALLY BE HIGHER THAN THE ELEVATION OF THE TANK COVER, MUST BE BROUGHT TO THE ATTENTION OF AQUATIC RECREATION COMPANY LLC. ADDITIONAL INSTALLATION INSTRUCTIONS SUCH AS BALLAST AND COATING MAY BE REQUIRED.
5. BACKFILL: SIDEWALLS REQUIRE BACKFILL WHICH 100% SHALL PASS A 2" SCREEN MATERIAL MADE UP OF DRY SOIL, SAND, OR GRAVEL. MINIMUM 12" ALL SIDES OF THE TANK-FROM BASE TO TOP. NO PARALLEL BACKFILLING OR COMPACTION ALONG THE LENGTH OF SIDEWALLS IS PERMITTED. NO WHEEL OR TACK LOADING SIDEWALLS. MATERIAL ON TOP OF TANK TO PASS 4" SCREEN & DRY.
6. COVER MATERIAL: COVER MATERIAL SHALL BE DRY SOIL, SAND, OR GRAVEL MATERIAL THAT HAS THE ABILITY OF 100% TO BE ABLE TO PASS THROUGH A 4" SCREEN. COVER MATERIALS SHALL BE MOUNDED OVER TANK AND AROUND RISERS TO DIRECT RUN-OFF AWAY FROM STORAGE TANK.
7. WATER EVACUATE: FILTRATION PUMP MAY BE USED TO EVACUATE WATER FROM STORAGE TANK TO APPROVED WASTE CONNECTION IN EVENT OF WATER CONTAMINATION. TANK SHALL BE THOROUGHLY CLEANED AND SANITIZED PRIOR TO RE-FILLING. CONFIRM INSPECTION WITH YOUR LOCAL HEALTH DEPARTMENT RE-FILLING STORAGE TANK & RE-STARTING THE SYSTEM.
8. TANK STANDARD: TANK TO BE MANUFACTURED TO ASTM C-913 AND C-1227 STANDARDS. ALL SEAMS AND PIPE PENETRATIONS TO BE WATER TIGHT.

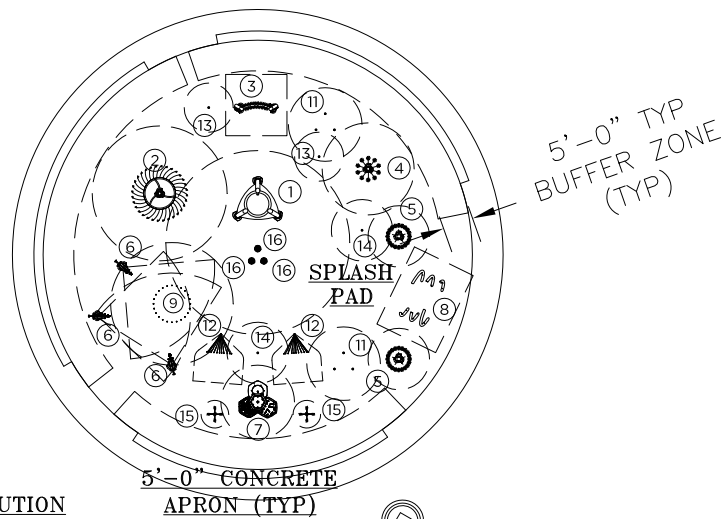
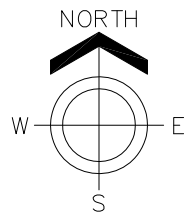
NO.	REVISION	DATE	DATE
A	RELEASE FOR APPROVAL	2/9/22	4/4/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/4/22	5/18/22
C	REVISED PER UPDATED INFORMATION	5/18/22	6/14/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22	11/30/22
E	ADDED 5' BUFFER ZONE	11/30/22	

101 MCINLEY PARKWAY DELANO, MN 55328 TEL: 952-445-8335 FAX: 952-345-6544 www.aquatix.com	<b>SYCAMORE TRAILS AQUATIC CENTER</b> <b>SPLASH PAD</b> LOCATION: MIAMISBURG, OH
--	--

CHECKED: [1156080-05-02-1] DRAWN: [CTS] SCALE: SEE VIEWS	DWS: FILE: [1156080-05-02-1] SHEET: [1] OF [13]	DATE: 2/7/22 JOB NO: 1156080-05-02 GENERAL INFORMATION
--	--	--



SITE LAYOUT ASSUMES NO STRONG PREVAILING WINDS FROM ANY SPECIFIC DIRECTION. PLEASE ADVISE ARC AS SOON AS POSSIBLE IF WIND CONDITIONS MAY EFFECT PRODUCT SPRAY ZONES.

EXISTING DISTRIBUTION HEADER VAULT

5'-0" CONCRETE APRON (TYP)

LIFT STATION MANHOLE

**APPROVED**  
By Victor Nduaguba, PE at 7:35 am, Dec 16, 2022

EXISTING POOL GUTTER

EXISTING POOL  
SEE ORIGINAL POOL DRAWING SHEET PL1.0 FOR POOL SPECIFICATIONS

LIFT STATION CONTROL PANEL

EXISTING FEATURE PUMP CONTROL PANEL W/ VFD

EXISTING MECHANICAL ROOM

EXISTING FEATURE PUMP

SEE SHEETS 7/13, 8/13, AND 8-1/13 FOR EXISTING FILTRATION SYSTEM

EXISTING SUCTION PIT

NO	PRODUCT	QTY	GPM	LINE SIZE
1	FLASHFLOOD	1	20	1 1/2"
2	HYDROHELIX	1	30	1 1/2"
3	WATERWAY	1	10	1"
4	SPRAYSTACKER	1	20	1 1/2"
5	SPRAYSHROUD	2	20 EA	1 1/2" EA
6	JETSTREAM	3	5 EA	1" EA
7	AQUAGATHER STATION	1	10	1"
8	WHIRLFLEX	1	30	1 1/2"
9	UPWARD SPRAY RING	1	110	4"
10	<del>TRIPLE ARCH JET</del>	<del>3</del>	<del>5 EA</del>	<del>1" EA</del>
11	STREAM JET TRIANGLE	2	15 EA	1 1/2" EA
12	CROWN JET	2	5 EA	1" EA
13	JR WATER JEWEL	2	7 EA	1" EA
14	MINI PILLAR	2	10 EA	1" EA
15	SEA CRAWLER	2	5 EA	1" EA
16	DRAIN BOX W/ STRAINER	3	175 EA MIN.	6" EA

- NOTE:
- ALL CONCRETE SLOPES TO BE 1/8"/FT MIN. AND 1/4"/FT MAX.
  - SITE ELEVATIONS OF SPLASH PAD AND CONCRETE APRON TO BE VERIFIED BY OTHERS. ARC ELEVATION REFERENCE IS 0'-0" FOR TOP OF DRAINAGE BOX. ALL OTHER NOTED ELEVATIONS ARE REFERENCED FROM THAT POINT.
  - SURFACE MOUNTED STRUCTURES MAY REQUIRE A FLAT/LEVEL SURFACE FOR PROPER INSTALLATION. SEE INDIVIDUAL STRUCTURE MOUNTING INSTALLATION INSTRUCTIONS.
  - ACTUAL SIZE, SHAPE, AND LOCATION OF SPLASH PAD TO BE FIELD DETERMINED BY OTHERS. ALL DIMENSIONS OF SIZE AND SHAPE OF SPLASH PAD FOR REFERENCE ONLY.
  - INDICATES SAW CUT JOINT
  - ==== INDICATES EXPANSION JOINT
  - THE INTENT OF A SPLASH PAD IS TO BE A DRY DECK WITH NO STANDING WATER. THE WATER IS TO BE CONTAINED WITHIN THE PERIMETER OF THE SPLASH PAD AND ALL WATER IS TO DRAIN INTO THE DRAINAGE BOX. THE CONCRETE IS TO BE FORMED AND SLOPED TO ACCOMMODATE THIS DRAIN PATTERN.
  - UNDER NO CIRCUMSTANCES SHALL THE SURROUNDING HARDSCAPE AREA BE SLOPED TO ALLOW WATER TO BE DRAINED INTO THE SPLASH PAD DECK.
  - ALL CONCRETE SURFACES TO HAVE A MEDIUM BROOM FINISH.
  - EXPANSION JOINT TO BE EVERY 20'x20'.
  - SAW CUT JOINT TO BE EVERY 10'x10'.
  - COORDINATE EXPANSION JOINT AND SAW CUT LOCATIONS WITH PLAY EQUIPMENT LOCATIONS.
  - SEE SHEET 3 OF 13 FOR SPLASH PAD LAYOUT.
  - SEE SHEET 4 OF 13 FOR CONCRETE LAYOUT.
  - DRAWINGS ARE FOR DESIGN/LAYOUT PURPOSES ONLY. PLEASE SEE AQUATIC RECREATION COMPANY PROPOSAL FOR INCLUDED STRUCTURES, EQUIPMENT, SERVICES, AND EXCLUSIONS.
  - INDICATES SPLASH ZONE.
  - SPLASH ZONES ARE APPROXIMATE. ACTUAL SPLASH ZONE MAY VARY BASED ON VARIOUS ENVIRONMENTAL CONDITIONS, FLOW RATES, SLOPE OF THE SPLASH PAD, SUBMERGENCE DEPTH AND WIND.

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/14/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

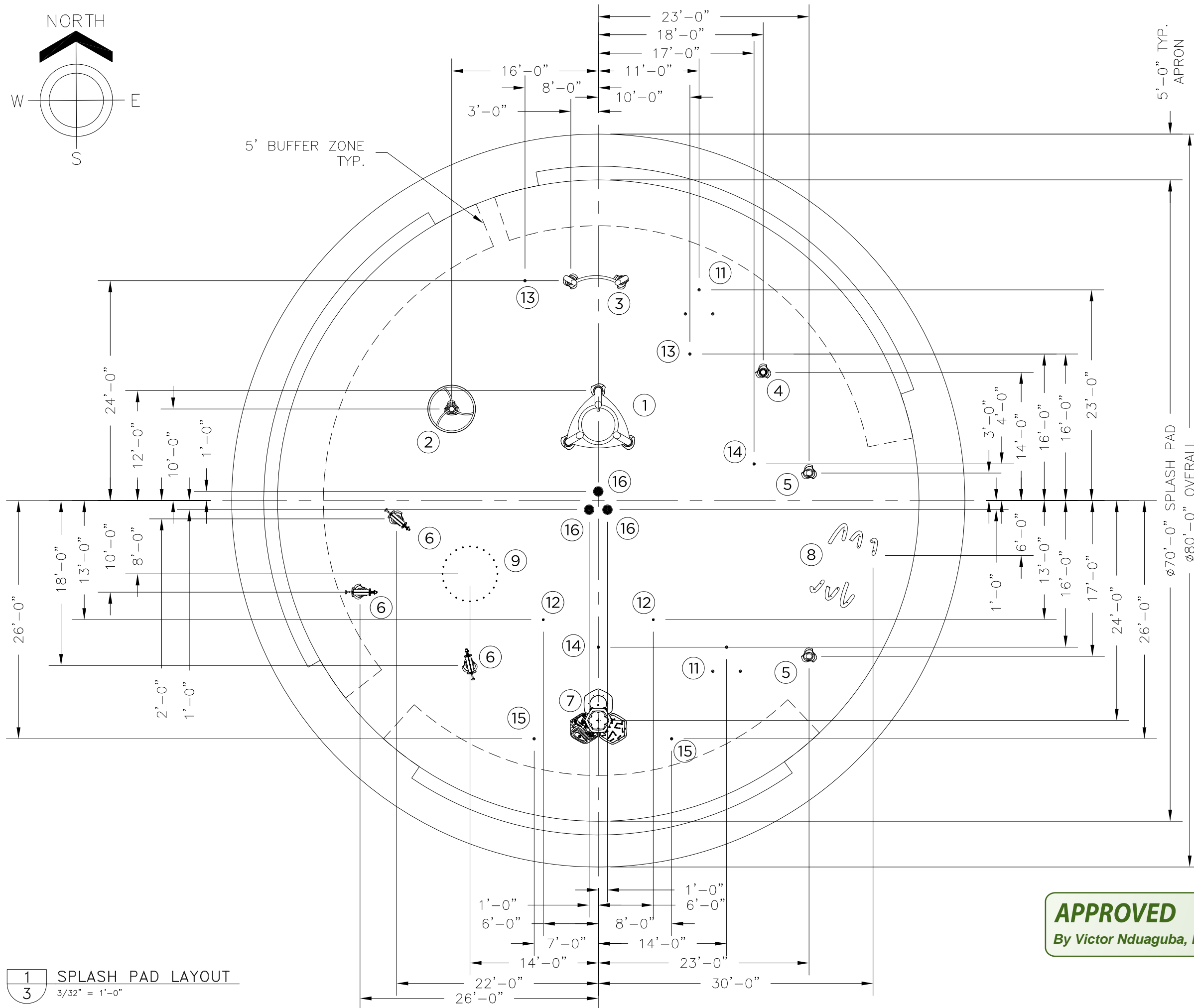
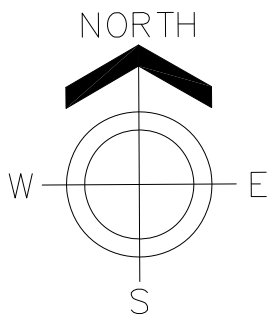
101 MADRILEY PARKWAY  
DELANO, MN 55328  
TEL: 952-245-5335  
LOCAL: 952-245-5335  
FAX: 952-245-6444  
aquatic@aquatic.com

**aquatix**  
by landscape structures

JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
SPLASH PAD  
LOCATION: MIAMISBURG, OH

DATE: 2/7/22  
DWG. FILE: 1156080-05-02-2  
CHECKED: [ ]  
DRAWN: CTS  
SCALE: SEE VIEWS  
SHEET TITLE: SITE PLAN  
JOB NO.: 1156080-05-02

2 OF 13



NO	PRODUCT	QTY	GPM	LINE SIZE
1	FLASHFLOOD	1	20	1½"
2	HYDROHELIX	1	30	1½"
3	WATERWAY	1	10	1"
4	SPRAYSTACKER	1	20	1½"
5	SPRAYSHROUD	2	20 EA	1½" EA
6	JETSTREAM	3	5 EA	1" EA
7	AQUAGATHER STATION	1	10	1"
8	WHIRLFLEX	1	30	1½"
9	UPWARD SPRAY RING	1	110	4"
10	<del>TRIPLE ARCH JET</del>	<del>3</del>	<del>5 EA</del>	<del>1" EA</del>
11	STREAM JET TRIANGLE	2	15 EA	1½" EA
12	CROWN JET	2	5 EA	1" EA
13	JR WATER JEWEL	2	7 EA	1" EA
14	MINI PILLAR	2	10 EA	1" EA
15	SEA CRAWLER	2	5 EA	1" EA
16	DRAIN BOX W/ STRAINER	3	175 EA MIN.	6" EA

- NOTE:
- ALL CONCRETE SLOPES TO BE 1/8"/FT MIN. AND 1/4"/FT MAX.
  - SITE ELEVATIONS OF SPLASH PAD AND CONCRETE APRON TO BE VERIFIED BY OTHERS. ARC ELEVATION REFERENCE IS 0'-0" FOR TOP OF DRAINAGE BOX. ALL OTHER NOTED ELEVATIONS ARE REFERENCED FROM THAT POINT.
  - SURFACE MOUNTED STRUCTURES MAY REQUIRE A FLAT/LEVEL SURFACE FOR PROPER INSTALLATION. SEE INDIVIDUAL STRUCTURE MOUNTING INSTALLATION INSTRUCTIONS.
  - ACTUAL SIZE, SHAPE, AND LOCATION OF SPLASH PAD TO BE FIELD DETERMINED BY OTHERS. ALL DIMENSIONS OF SIZE AND SHAPE OF SPLASH PAD FOR REFERENCE ONLY.
  - INDICATES SAW CUT JOINT
  - INDICATES EXPANSION JOINT
  - THE INTENT OF A SPLASH PAD IS TO BE A DRY DECK WITH NO STANDING WATER. THE WATER IS TO BE CONTAINED WITHIN THE PERIMETER OF THE SPLASH PAD AND ALL WATER IS TO DRAIN INTO THE DRAINAGE BOX. THE CONCRETE IS TO BE FORMED AND SLOPED TO ACCOMMODATE THIS DRAIN PATTERN.
  - UNDER NO CIRCUMSTANCES SHALL THE SURROUNDING HARDSCAPE AREA BE SLOPED TO ALLOW WATER TO BE DRAINED INTO THE SPLASH PAD DECK.
  - ALL CONCRETE SURFACES TO HAVE A MEDIUM BROOM FINISH.
  - EXPANSION JOINT TO BE EVERY 20'x20'.
  - SAW CUT JOINT TO BE EVERY 10'x10'.
  - COORDINATE EXPANSION JOINT AND SAW CUT LOCATIONS WITH PLAY EQUIPMENT LOCATIONS.
  - SEE SHEET 3 OF 13 FOR SPLASH PAD LAYOUT.
  - SEE SHEET 4 OF 13 FOR CONCRETE LAYOUT.
  - DRAWINGS ARE FOR DESIGN/LAYOUT PURPOSES ONLY. PLEASE SEE AQUATIC RECREATION COMPANY PROPOSAL FOR INCLUDED STRUCTURES, EQUIPMENT, SERVICES, AND EXCLUSIONS.
  - INDICATES SPLASH ZONE.
  - SPLASH ZONES ARE APPROXIMATE. ACTUAL SPLASH ZONE MAY VARY BASED ON VARIOUS ENVIRONMENTAL CONDITIONS, FLOW RATES, SLOPE OF THE SPLASH PAD, SUBMERGENCE DEPTH AND WIND.

**APPROVED**  
By Victor Nduaguba, PE at 7:35 am, Dec 16, 2022

1 SPLASH PAD LAYOUT  
3/32" = 1'-0"

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/1/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

101 MCKINLEY PARKWAY  
DELANO, MN 55328  
LOCAL 952-245-5335  
FAX 952-245-6444  
aquatic@aquatix.com

**aquatix**  
by landscape structures

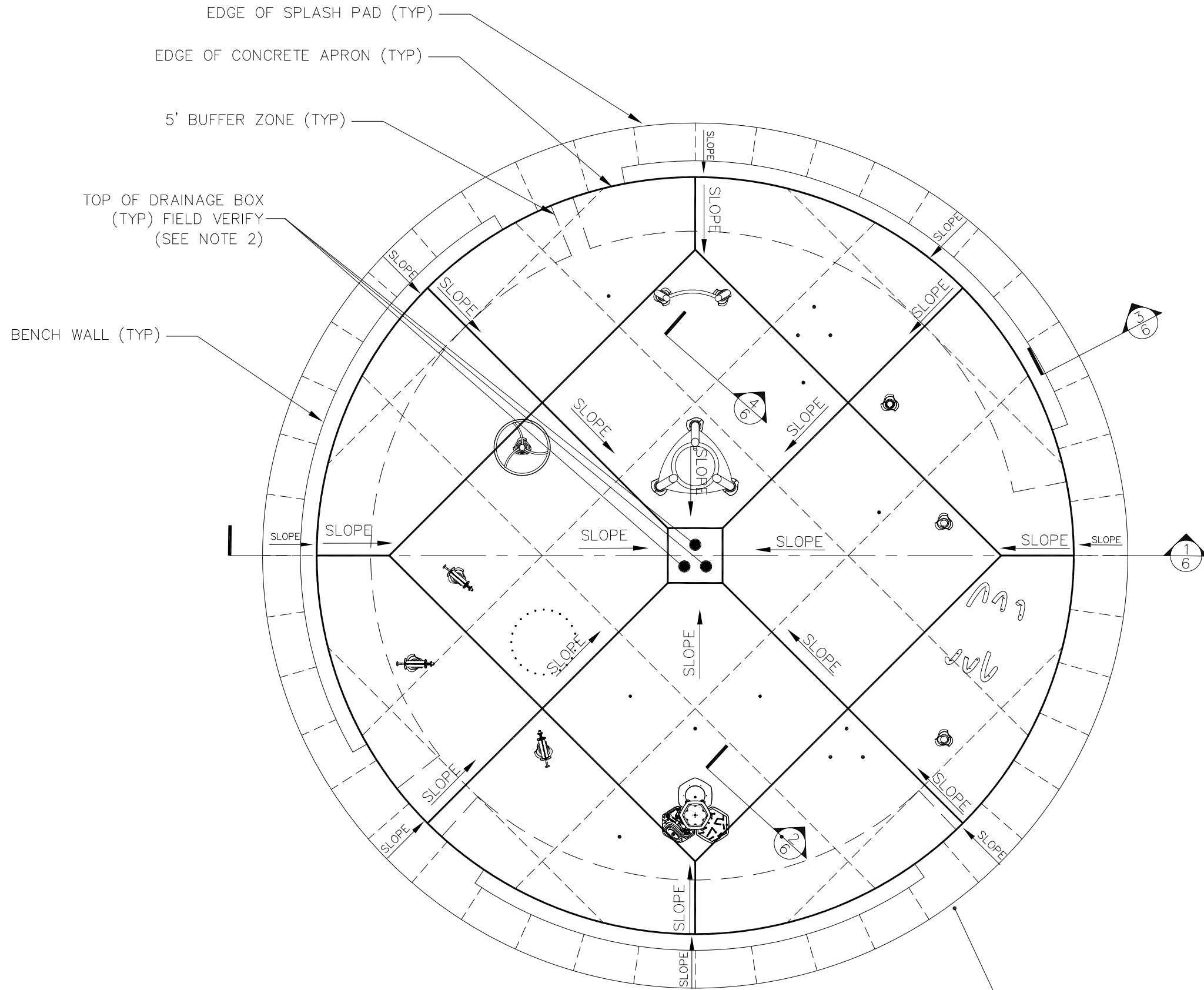
JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
SPLASH PAD  
LOCATION: MIAMISBURG, OH

DWG. FILE: 1156080-05-02-3  
DATE: 2/7/22  
SHEET TITLE: SPLASH PAD LAYOUT

SCALE: SEE VIEWS  
DRAWN: CTS  
CHECKED: [ ]  
JOB NO.: 1156080-05-02

3 OF 13





- NOTE:
1. ALL CONCRETE SLOPES TO BE 1/8"/FT MIN. AND 1/4"/FT MAX.
  2. SITE ELEVATIONS OF SPLASH PAD AND CONCRETE APRON TO BE VERIFIED BY OTHERS. ARC ELEVATION REFERENCE IS 0'-0" FOR TOP OF COLLECTOR BOX. ALL OTHER NOTED ELEVATIONS ARE REFERENCED FROM THAT POINT.
  3. SURFACE MOUNTED STRUCTURES MAY REQUIRE A FLAT/LEVEL SURFACE FOR PROPER INSTALLATION. SEE INDIVIDUAL STRUCTURE MOUNTING INSTALLATION INSTRUCTIONS.
  4. REFER TO SPEC SHEET AND INSTALLATION DRAWING FOR EACH PRODUCT.
  5. ACTUAL SIZE, SHAPE, AND LOCATION OF SPLASH PAD TO BE FIELD DETERMINED BY OTHERS. ALL DIMENSIONS OF SIZE AND SHAPE OF SPLASH PAD FOR REFERENCE ONLY.
  6. — — — INDICATES SAW CUT JOINT
  7. ———— INDICATES EXPANSION JOINT
  8. THE INTENT OF A SPLASH PAD IS TO BE A DRY DECK WITH NO STANDING WATER. THE WATER IS TO BE CONTAINED WITHIN THE PERIMETER OF THE SPLASH PAD AND ALL WATER IS TO DRAIN INTO THE COLLECTOR BOX(S). THE CONCRETE IS TO BE FORMED AND SLOPED TO ACCOMMODATE THIS DRAIN PATTERN.
  9. ALL TREATED SPLASH PAD WATER IS INTENDED TO REMAIN WITHIN DESIGNATED SPLASH PAD DECK. UNDER NO CIRCUMSTANCES SHOULD SLOPE OF SPLASH PAD ALLOW WATER TO DRAIN OFF PAD
  10. UNDER NO CIRCUMSTANCES SHALL THE SURROUNDING HARDSCAPE AREA BE SLOPED TO ALLOW WATER TO BE DRAINED INTO THE SPLASH PAD DECK
  11. ALL CONCRETE SURFACES TO HAVE A MEDIUM BROOM FINISH.
  12. EXPANSION JOINT TO BE EVERY 20'x20'.
  13. SAW CUT JOINT TO BE EVERY 10'x10'.
  14. COORDINATE EXPANSION JOINT AND SAW CUT LOCATIONS WITH PLAY EQUIPMENT LOCATIONS.

SEE PAGE 6 OF 13 FOR SECTION DETAILS

IMPORTANT: SEE NOTE #8 CONCERNING SPLASH PAD SLOPE

**APPROVED**  
By Victor Nduaguba, PE at 7:35 am, Dec 16, 2022

PERIMETER OF CONCRETE APRON FIELD VERIFY (SEE NOTE 2)

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/14/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

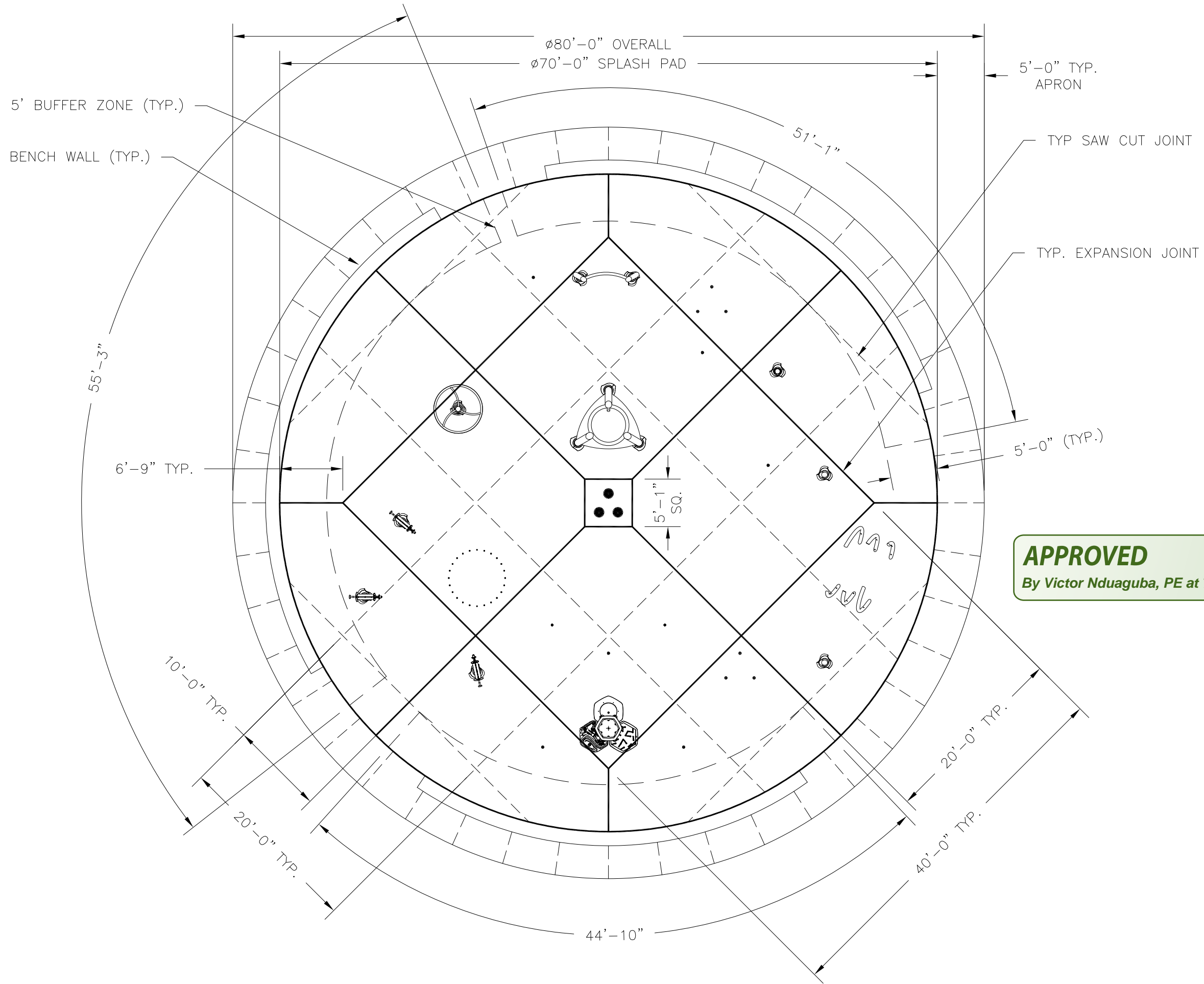
100 MCKINLEY PARKWAY  
DELANO, MN 55328  
LOCAL 952-445-9335  
Fax 952-245-4444  
aquatix.com

**aquatix**  
by landscape structures

JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
SPLASH PAD  
LOCATION: MIAMISBURG, OH

SCALE: SEE VIEWS  
DRAWN: CTS  
CHECKED: CTS  
DWG. FILE: 1156080-05-02-4  
DATE: 2/7/22  
SHEET TITLE: SPLASH PAD CONCRETE PLAN  
JOB NO.: 1156080-05-02

4 OF 13



- NOTE:
1. ALL CONCRETE SLOPES TO BE 1/8"/FT MIN. AND 1/4"/FT MAX.
  2. SITE ELEVATIONS OF SPLASH PAD AND CONCRETE APRON TO BE VERIFIED BY OTHERS. ARC ELEVATION REFERENCE IS 0'-0" FOR TOP OF COLLECTOR BOX. ALL OTHER NOTED ELEVATIONS ARE REFERENCED FROM THAT POINT.
  3. SURFACE MOUNTED STRUCTURES MAY REQUIRE A FLAT/LEVEL SURFACE FOR PROPER INSTALLATION. SEE INDIVIDUAL STRUCTURE MOUNTING INSTALLATION INSTRUCTIONS.
  4. REFER TO SPEC SHEET AND INSTALLATION DRAWING FOR EACH PRODUCT.
  5. ACTUAL SIZE, SHAPE, AND LOCATION OF SPLASH PAD TO BE FIELD DETERMINED BY OTHERS. ALL DIMENSIONS OF SIZE AND SHAPE OF SPLASH PAD FOR REFERENCE ONLY.
  6. - - - - INDICATES SAW CUT JOINT
  7. ——— INDICATES EXPANSION JOINT
  8. THE INTENT OF A SPLASH PAD IS TO BE A DRY DECK WITH NO STANDING WATER. THE WATER IS TO BE CONTAINED WITHIN THE PERIMETER OF THE SPLASH PAD AND ALL WATER IS TO DRAIN INTO THE COLLECTOR BOX(S). THE CONCRETE IS TO BE FORMED AND SLOPED TO ACCOMMODATE THIS DRAIN PATTERN.
  9. ALL TREATED SPLASH PAD WATER IS INTENDED TO REMAIN WITHIN DESIGNATED SPLASH PAD DECK. UNDER NO CIRCUMSTANCES SHOULD SLOPE OF SPLASH PAD ALLOW WATER TO DRAIN OFF PAD
  10. UNDER NO CIRCUMSTANCES SHALL THE SURROUNDING HARDSCAPE AREA BE SLOPED TO ALLOW WATER TO BE DRAINED INTO THE SPLASH PAD DECK
  11. ALL CONCRETE SURFACES TO HAVE A MEDIUM BROOM FINISH.
  12. EXPANSION JOINT TO BE EVERY 20'x20'.
  13. SAW CUT JOINT TO BE EVERY 10'x10'.
  14. COORDINATE EXPANSION JOINT AND SAW CUT LOCATIONS WITH PLAY EQUIPMENT LOCATIONS.

SEE PAGE 6 OF 13 FOR SECTION DETAILS

**APPROVED**  
By Victor Nduaguba, PE at 7:35 am, Dec 16, 2022

IMPORTANT: SEE NOTE #8 CONCERNING SPLASH PAD SLOPE

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/1/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

101 MCKINLEY PARKWAY  
DELAND, MN 55228  
LOCAL 952-445-5335  
Fax 952-245-6444  
aquatix@aquatix.com

**aquatix**  
by landscape structures

JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
SPLASH PAD  
LOCATION: MIAMISBURG, OH

SCALE: SEE VIEWS  
DRAWN: CTS  
CHECKED: DWG. FILE: 1156080-05-02-5  
DATE: 2/7/22  
SHEET TITLE: SPLASH PAD CONCRETE FORM  
JOB NO.: 1156080-05-02

5 OF 13



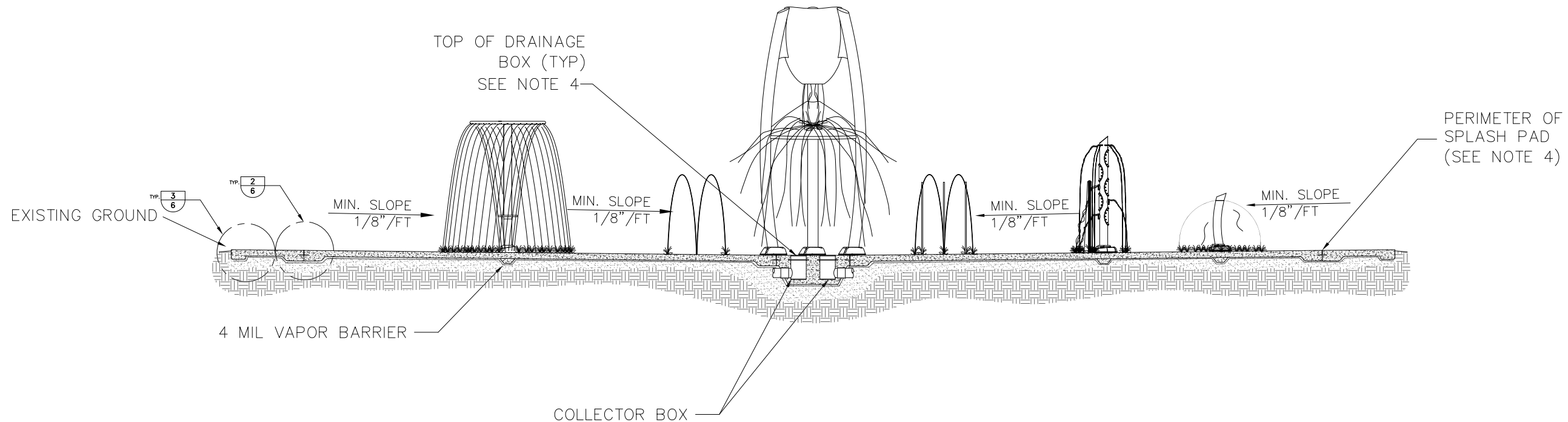
**NOTE:**

1. ALL SUB-BASE MATERIALS BY OTHERS, CONTRACTOR CAN ASSUME SITE TO BE LEVEL TO ROUGH GRADE WITH COMPACTED FILL, COMPACTION TEST BY OTHERS.
2. CONCRETE TO BE THICKENED AT ALL PRODUCT INSTALLATION LOCATIONS (BOTH EMBED AND ABOVE GROUND STRUCTURES). REFER TO INSTALLATION DRAWINGS FOR EACH PRODUCT.
3. ALL CONCRETE SLOPES TO BE 1/8"/FT MIN.
4. SITE ELEVATIONS OF SPLASH PAD AND CONCRETE APRON TO BE VERIFIED BY OTHERS. AQUATIX™ ELEVATION REFERENCE IS 0.00 FOR TOP OF COLLECTOR BOX AND TOP OF GRADE AT UNDERGROUND STORAGE TANK.
5. ACTUAL SIZE, SHAPE, AND LOCATION OF SPLASH PAD TO BE FIELD DETERMINED BY OTHERS. ALL DIMENSIONS OF SIZE AND SHAPE OF SPLASH PAD FOR REFERENCE ONLY.
6. THE INTENT OF A SPLASH PAD IS TO BE A DRY DECK WITH NO STANDING WATER, THE WATER IS TO BE CONTAINED WITHIN THE PERIMETER OF THE SPLASH PAD AND ALL WATER IS TO DRAIN INTO COLLECTOR BOX. THE CONCRETE IS TO BE FORMED AND SLOPED TO ACCOMMODATE THE DRAIN PATTERN.
7. ALL TREATED SPLASH PAD WATER IS INTENDED TO REMAIN WITHIN DESIGNATED SPLASH PAD DECK. UNDER NO CIRCUMSTANCES SHOULD SLOPE OF SPLASH PAD OR SLOPE OF SURROUNDING AREA ALLOW WATER TO DRAIN OFF PAD.

**NOTE: (CONTINUED)**

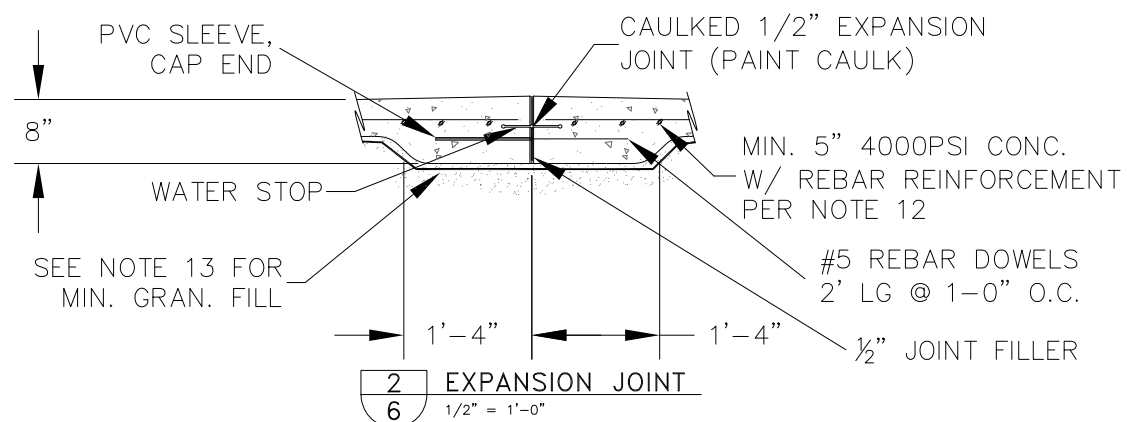
8. UNDER NO CIRCUMSTANCES SHALL THE SURROUNDING HARDSCAPE AREA BE SLOPED TO ALLOW WATER TO BE DRAINED INTO THE SPLASH PAD DECK
9. ALL CONCRETE SURFACES TO HAVE A MEDIUM BROOM FINISH.
10. COORDINATE EXACT LOCATION OF SAW CUTS AND EXPANSION JOINTS WITH PLAY EQUIPMENT LOCATIONS.
11. VERIFY LOCAL/STATE CODES FOR TYPE, THICKNESS, & REINFORCEMENT REQUIREMENTS FOR CONCRETE SLAB.
12. CONCRETE REINFORCEMENT TO BE #4 REBAR @ 12" O.C. EACH WAY OR EQUIVALENT WELDED WIRE MESH (W6 ON 4"X4" SPACING OR W10 ON 6"X6" SPACING)
13. 18" OF GRANULAR FILL RECOMMENDED, OR AS SOIL CONDITIONS AND/OR LOCAL CODE REQUIRES WITH A MINIMUM OF 2500 PSF SOIL BEARING CAPACITY
14. THERE IS TO BE A MINIMUM OF 6" OF GRANULAR FILL AROUND ALL PIPING

SEE PAGE 4 OF 13 FOR LOCATIONS OF DETAILS



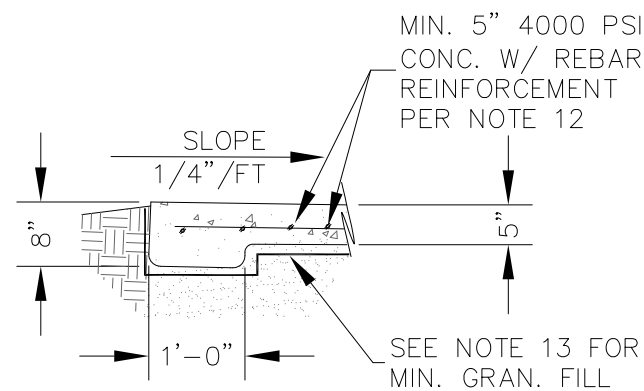
**1** SPLASH PAD SECTION  
3/16" = 1'-0"

**NOTE:**  
-FIELD VERIFY LOCATION AND ELEVATIONS OF JOINTS.  
CONTRACTOR MAY SUBMIT NEW LOCATIONS FOR APPROVAL  
-DIAGRAMMATIC ONLY

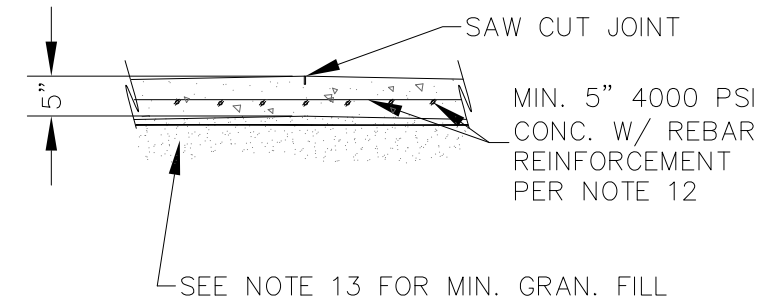


**2** EXPANSION JOINT  
1/2" = 1'-0"

**NOTE:**  
-FIELD VERIFY LOCATION AND ELEVATIONS OF JOINTS.  
CONTRACTOR MAY SUBMIT NEW LOCATIONS FOR APPROVAL  
-DIAGRAMMATIC ONLY




**3** EDGE DETAIL  
1/2" = 1'-0"



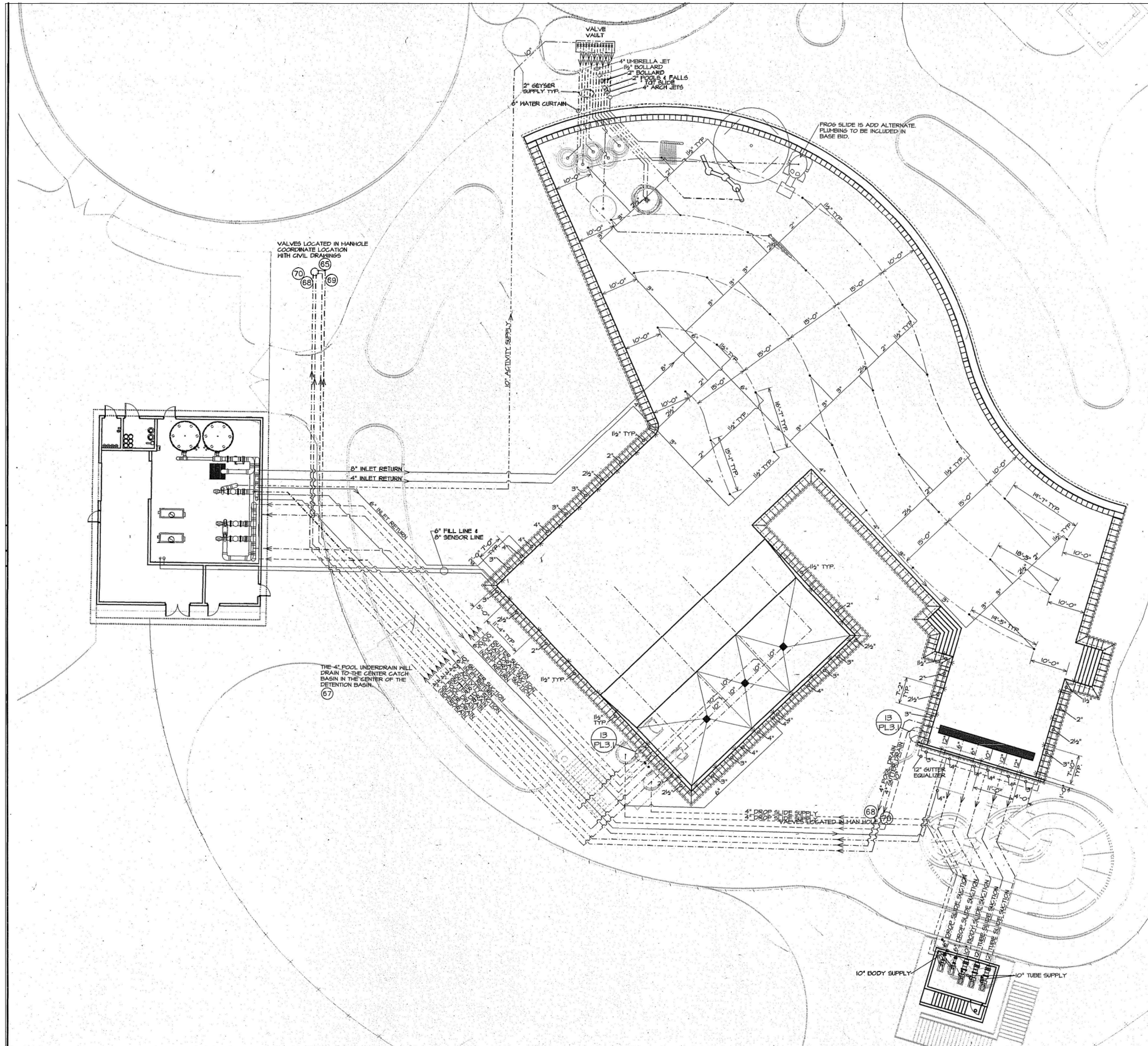
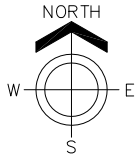
**4** SAW CUT JOINT  
1/2" = 1'-0"

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/4/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

101 MONKEY PARKWAY DELANO, MN 55328 TEL: 952-445-8335 FAX: 952-445-8444 aquatix@ahd.com	 by landscape structures
JOB TITLE	SYCAMORE TRAILS AQUATIC CENTER
LOCATION	MIAMISBURG, OH
PROJECT	SPLASH PAD
SHEET TITLE	SPLASH PAD CONCRETE SECTIONS AND DETAILS
DATE	2/7/22
DWG. FILE	1156080-05-02-6
CHECKED	
DRAWN	
SCALE	SEE VIEWS
JOB NO.	1156080-05-02





NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/4/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

101 MCINLEY PARKWAY  
 DELAND, FL 32828  
 TEL: 905-345-6335  
 FAX: 905-345-6444  
 aquatix@atix.com



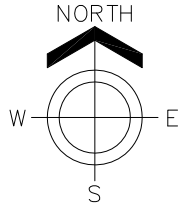
JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
 SPLASH PAD  
 LOCATION: MIAMISBURG, OH

SCALE	DRAWN	CHECKED	DWG. FILE	DATE
SEE VIEWS	CTS		1156080-05-02-2	2/7/22

SHEET TITLE: EXISTING PIPING PLAN

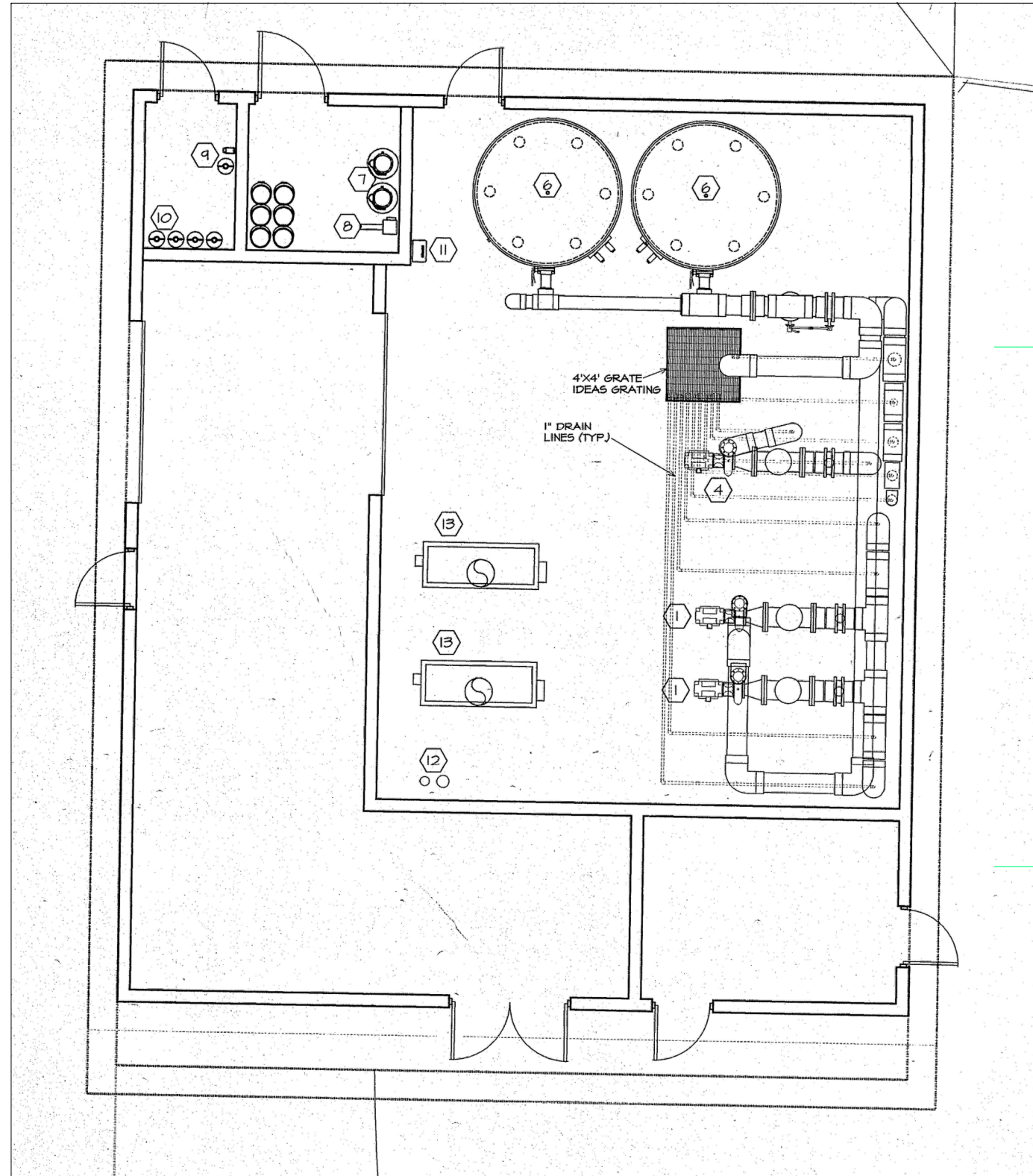
JOB NO.  
1156080-05-02





VOLUME (INCLUDING SURGE)	
ACTIVITY AREA (0" - 36"):	94,311 GALLONS
ACTIVITY AREA (36" - 60"):	62,998 GALLONS
ACTIVITY AREA (60" - 72"):	91,680 GALLONS
PLUNGE AREA:	24,327 GALLONS
DIVING AREA:	139,283 GALLONS
TOTAL:	412,599 GALLONS
TURNOVER RATE	
ACTIVITY AREA (0" - 36"):	120 MIN
ACTIVITY AREA (36" - 60"):	240 MIN
ACTIVITY AREA (60" - 72"):	240 MIN
PLUNGE AREA:	60 MIN
DIVING AREA:	300 MIN
FILTRATION RATE	
ACTIVITY AREA (0" - 36"):	786 GPM
ACTIVITY AREA (36" - 60"):	262 GPM
ACTIVITY AREA (60" - 72"):	382 GPM
PLUNGE AREA:	406 GPM
DIVING AREA:	465 GPM
TOTAL:	2,301 GPM

TOTAL POOL VOLUME: 412,599 GAL.  
 TOTAL TURN OVER RATE: 2,301 GPM.  
 TOTAL TURN OVER DURATION: 2.9 HRS.



ACTIVITY/PLUNGE/DIVING POOL EQUIPMENT LIST			
KEY	EQUIPMENT	QNTY	DESCRIPTION
1	FILTRATION PUMP:	2	AURORA, END SUCTION, CLOSE COUPLED, BRONZE FITTED, EPOXY COATED VOLUTE, 341, 6X6X11, 40 HP, 230/460 VOLT, 3 PHASE, 1750 RPM, 1381 GPM @ 70' TDH (MINIMUM 75% EFFICIENCY AT 70% OF DESIGN FLOW) PROVIDE W/MER-MADE FILTER CO., 12" TO 6" ECCENTRIC REDUCING BASKET STRAINER, FIBERGLASS BODY, ACRYLIC LID, STAINLESS STEEL STRAINER BASKET & 1 EXTRA S.S. BASKET.
2	BODY SLIDE PUMP:	1	AURORA, END SUCTION, CLOSE COUPLED, BRONZE FITTED, EPOXY COATED VOLUTE, 341, 5X6X11, 10 HP, 230/460 VOLT, 3 PHASE, 1750 RPM, 1000 GPM @ 45' TDH.
3	TUBE SLIDE PUMP:	2	AURORA, END SUCTION, CLOSE COUPLED, BRONZE FITTED, EPOXY COATED VOLUTE, 341, 6X6X11, 20 HP, 230/460 VOLT, 3 PHASE, 1750 RPM, 1500 GPM @ 45' TDH.
4	ACTIVITY PUMP:	1	AURORA, END SUCTION, CLOSE COUPLED, BRONZE FITTED, EPOXY COATED VOLUTE, 341, 6X6X11, 20 HP, 230/460 VOLT, 3 PHASE, 1750 RPM, 1450 GPM @ 35' TDH. PROVIDE W/MER-MADE FILTER CO., 10" FIBERGLASS BODY, ACRYLIC LID, STAINLESS STEEL STRAINER BASKET & 1 EXTRA S.S. BASKET.
5	DROP SLIDE PUMP (FUTURE):	2	AURORA, END SUCTION, CLOSE COUPLED, BRONZE FITTED, EPOXY COATED VOLUTE, 341, 3X4X9A, 3 HP, 230/460 VOLT, 3 PHASE, 1750 RPM, 300 GPM @ 35' TDH.
6	FILTER:	1	NEPTUNE/BENSON, #96DDC-12, 96" DUAL CELL TANK, 201.0 SQUARE FEET OF FILTER AREA PROVIDED, 153.4 SQUARE FEET OF FILTER AREA REQUIRED BY CODE, 114 GPM/S.F. OF FILTER AREA, SINGLE LEVER LINKAGE, MANUALLY BACKWASH ONE CELL AT A TIME.
7	CHLORINATOR:	2	OLIN POOL II, PCP-3000, 2.8 - 22 LBS PER DAY NORMAL OUTPUT, 26.0 - 48.0 LBS PER DAY HIGH CAPACITY.
8	BOOSTER PUMP:	1	GOULDS, #NPE/1ST, 3/4 HP, 115/230 VOLT, CLOSE COUPLED, STAINLESS STEEL CONSTRUCTION, 20 GPH @ 50 PSI.
	VENTURI:	1	MAZZEI, MODEL #878, 1" NPT, POLYPROPYLENE.
	SOLENOID VALVE:	1	ASCO 8210 SERIES, BRASS BODY, BUNA N TRIM, NORMALLY CLOSED, 115 VOLT.
9	ACID PUMP (MURIATIC ACID)	1	LMI, LMI-B131-72S, .02 TO 4.5 GALLONS PER HOUR CAPACITY, COMPLETE WITH POLYURETHANE COATED CAST METAL BRACKET ASM WITH MOUNTING HARDWARE.
10	STORAGE TANK		CARBOYS, FURNISHED BY OWNER'S CHEMICAL SUPPLIER.
11	CHEMICAL CONTROLLER:	1	STRANTRON, SYSTEM FOUR, CONTINUOUS MONITORING AND CONTROL, 0.0 TO 14.0 PH RANGE, 0.0 TO 20.0 CHLORINE RANGE, 1 - 1000 MW ORP RANGE, WITH WSRK SAMPLE STREAM ASSEMBLY.
12	AUTO-FILL:	1	CLA VALVE, 124-01A, 1 1/2" WITH CF1 FLOAT CONTROLLER, PROVIDE FLOAT ROD LENGTH AS REQUIRED.
	FLOWMETERS:	1	DIETERICH STANDARD, EAGLE EYE SERIES, GCR STAINLESS STEEL ANNUBAR, SADDLE MOUNTED, MAIN: 0-3000 GPM SCALE RETURN (0-36"): 0-1000 GPM SCALE RETURN (36-60"): 0-400 GPM SCALE RETURN (60-72"): 0-500 GPM SCALE RETURN (PLUNGE): 0-600 GPM SCALE RETURN (DIVING): 0-800 GPM SCALE
13	HEATER:	2	TELEDYNE LAARS, MIGHTY THERM MODEL #14301, 1,430,000 B.T.U. INPUT, 1 1/4" GAS CONNECTION, 2 1/2" WATER CONNECTION, 18" FLUE, PROVIDE WITH A.S.M.E. LABEL, RELIEF VALVE, FLOW SWITCH, SAFETY DEVICE PACKAGE PER OHIO CODE.
	THERMOMETERS:	3	TRERICE, A40 SERIES, 9" SCALE.
14	pH SYSTEM:	1	STRANTRON, CO2-5 SINGLE TANK PRESSURE REGULATOR WITH CO2-7 FEED UNIT AND ONE HEATING UNIT. CO2 CYLINDER FURNISHED BY OWNER, CONTRACTOR TO PROVIDE TANK RESTRAINTS PER CODE.
	NOTE:		CURRENT CHARACTERISTICS MAY VARY. THE 13150 CONTRACTOR SHALL VERIFY AVAILABLE VOLTAGE BEFORE ORDERING PUMP MOTORS.

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/4/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

101 MCINLEY PARKWAY  
 DELAWARE, OH 43028  
 614.892.3444  
 Fax 614.892.3444  
 info@aquatix.com

**aquatix**  
 by landscape structures

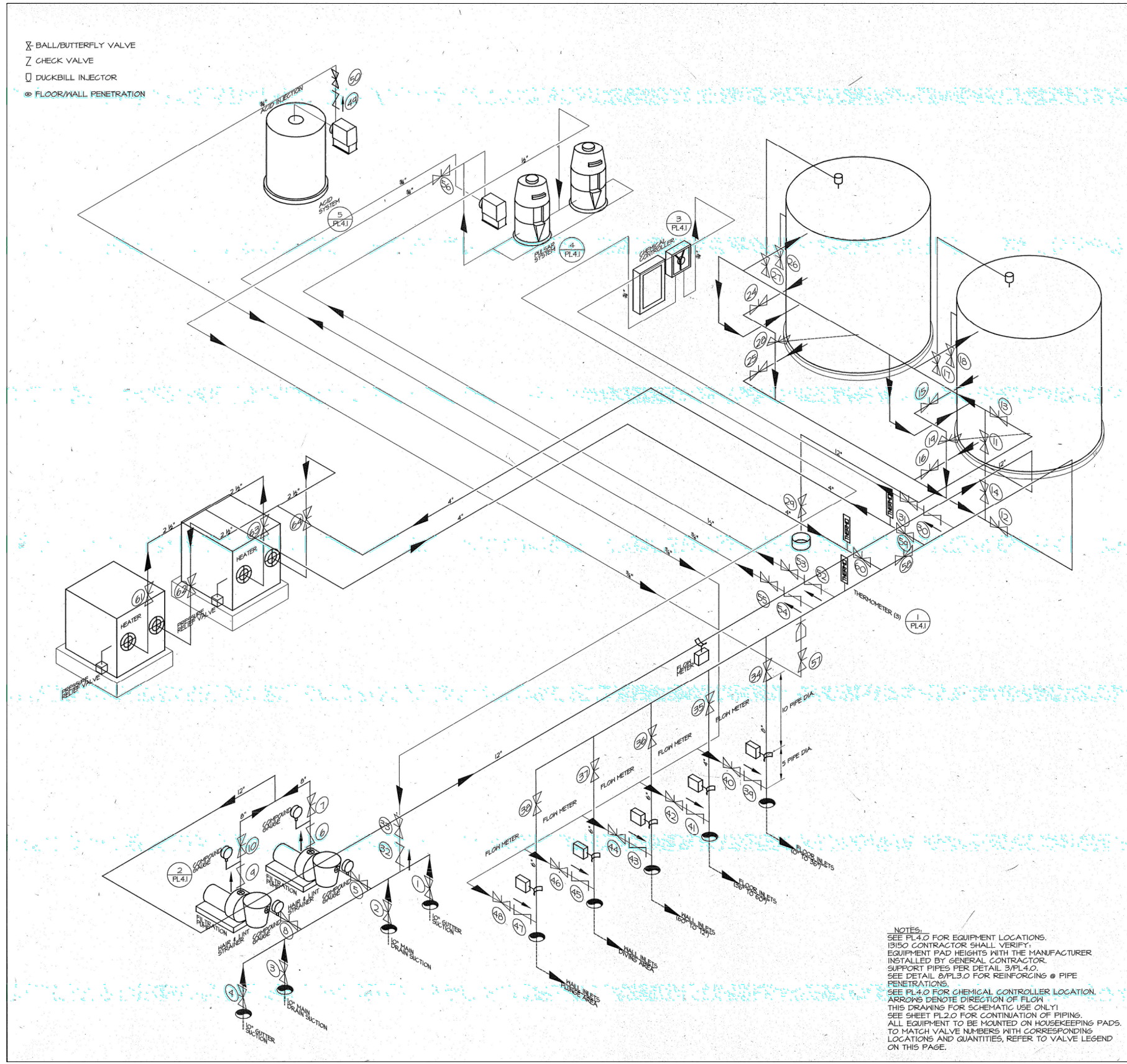
JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
 SPLASH PAD  
 LOCATION: MIAMISBURG, OH

SCALE: SEE VIEWS  
 DRAWN: CTS  
 CHECKED: 1156080-05-02-2  
 SHEET TITLE: EXISTING FILTRATION SYSTEM

JOB NO. 1156080-05-02

8 OF 13





NO.	TYPE	OPERATION	DESCRIPTION
1	BUTTERFLY	GEAR	GUTTER SUCTION
2	BUTTERFLY	GEAR	MAIN DRAIN SUCTION
3	BUTTERFLY	GEAR	MAIN DRAIN SUCTION
4	BUTTERFLY	GEAR	GUTTER SUCTION
5	BUTTERFLY	GEAR	PUMP #1 SUCTION
6	CHECK	---	PUMP #1 DISCHARGE
7	BUTTERFLY	GEAR	PUMP #1 THROTTLING
8	BUTTERFLY	GEAR	PUMP #2 SUCTION
9	CHECK	---	PUMP #2 DISCHARGE
10	BUTTERFLY	GEAR	PUMP #2 THROTTLING
11	BUTTERFLY	---	FILTER INFLUENT
12	BUTTERFLY	---	FILTER EFFLUENT
13	BUTTERFLY	---	FILTER BACKWASH
14	BUTTERFLY	---	FILTER BACKWASH
15	BUTTERFLY	---	FILTER CELL ISOLATION
16	BUTTERFLY	---	FILTER CELL ISOLATION
17	TUB.V.	---	FILTER AIR RELEASE
18	TUB.V.	---	FILTER AIR RELEASE
19	TUB.V.	---	FILTER DRAIN
20			
21			
22			
23			
24	BUTTERFLY	---	FILTER CELL ISOLATION
25	BUTTERFLY	---	FILTER CELL ISOLATION
26	TUB.V.	---	FILTER AIR RELEASE
27	TUB.V.	---	FILTER AIR RELEASE
28	TUB.V.	---	FILTER DRAIN
29	BUTTERFLY	GEAR	FILTER BACKWASH THROTTLING
30	TUB.C.	---	CHEMICAL SAMPLING
31	TUB.V.	---	CHEMICAL SAMPLING
32	TUB.C.	---	CHEMICAL SAMPLING DISCHARGE
33	TUB.V.	---	CHEMICAL SAMPLING DISCHARGE
34	BUTTERFLY	GEAR	FILTERED RETURN THROTTLING (0° TO 36°)
35	BUTTERFLY	GEAR	FILTERED RETURN THROTTLING (36° TO 60°)
36	BUTTERFLY	GEAR	FILTERED RETURN THROTTLING (60° TO 12°)
37	BUTTERFLY	GEAR	FILTERED RETURN THROTTLING (DIVING AREA)
38	BUTTERFLY	GEAR	FILTERED RETURN THROTTLING (PLUNGE AREA)
39	TUB.C.	---	CHEMICAL INJECTION (0° TO 36°)
40	TUB.V.	---	CHEMICAL INJECTION (0° TO 36°)
41	TUB.C.	---	CHEMICAL INJECTION (36° TO 60°)
42	TUB.V.	---	CHEMICAL INJECTION (36° TO 60°)
43	TUB.C.	---	CHEMICAL INJECTION (60° TO 12°)
44	TUB.V.	---	CHEMICAL INJECTION (60° TO 12°)
45	TUB.C.	---	CHEMICAL INJECTION (DIVING AREA)
46	TUB.V.	---	CHEMICAL INJECTION (DIVING AREA)
47	TUB.C.	---	CHEMICAL INJECTION (PLUNGE AREA)
48	TUB.V.	---	CHEMICAL INJECTION (PLUNGE AREA)
49	TUB.C.	---	ACID PUMP
50	TUB.V.	---	ACID PUMP
51			
52	TUB.C.	---	PULSAR SUCTION
53	TUB.V.	---	PULSAR SUCTION
54	TUB.C.	---	BOOSTER PUMP SUCTION
55	TUB.V.	---	BOOSTER PUMP SUCTION
56	TUB.V.	---	BOOSTER PUMP THROTTLING
57	TUB.V.	---	PULSAR INJECTION
58	BUTTERFLY	GEAR	HEATER BY-PASS
59	BUTTERFLY	GEAR	HEATER INFLUENT
60	BUTTERFLY	GEAR	HEATER EFFLUENT
61	TUB.V.	---	HEATER ISOLATION
62	TUB.V.	---	HEATER ISOLATION
63	TUB.V.	---	HEATER ISOLATION
64	TUB.V.	---	HEATER ISOLATION
65	BUTTERFLY	S.S.E.G.	POOL UNDERDRAIN
66			
67	BUTTERFLY	S.S.E.G.	GUTTER DRAIN
68	BUTTERFLY	S.S.E.G.	POOL DRAIN (PLUNGE AREA)
69	BUTTERFLY	S.S.E.G.	POOL DRAIN (DEEP AREA)
70	BUTTERFLY	S.S.E.G.	GUTTER DRAIN
71			
72			
80	BUTTERFLY	GEAR	TUBE SLIDE PUMP #1 SUCTION
81	CHECK	---	TUBE SLIDE PUMP #1 DISCHARGE
82	BUTTERFLY	GEAR	TUBE SLIDE PUMP #1 THROTTLING
83	BUTTERFLY	GEAR	TUBE SLIDE PUMP #2 SUCTION
84	CHECK	---	TUBE SLIDE PUMP #2 DISCHARGE
85	BUTTERFLY	GEAR	TUBE SLIDE PUMP #2 THROTTLING
86	BUTTERFLY	GEAR	BODY SLIDE PUMP SUCTION
87	CHECK	---	BODY SLIDE PUMP DISCHARGE
88	BUTTERFLY	GEAR	BODY SLIDE PUMP THROTTLING
89	BUTTERFLY	GEAR	DROP SLIDE PUMP #1 SUCTION
90	CHECK	---	DROP SLIDE PUMP #1 DISCHARGE
91	BUTTERFLY	GEAR	DROP SLIDE PUMP #1 THROTTLING
92	BUTTERFLY	GEAR	DROP SLIDE PUMP #2 SUCTION
93	CHECK	---	DROP SLIDE PUMP #2 DISCHARGE
94	BUTTERFLY	GEAR	DROP SLIDE PUMP #2 THROTTLING
95	BUTTERFLY	GEAR	ACTIVITY PUMP SUCTION
96	CHECK	---	ACTIVITY PUMP DISCHARGE
97	BUTTERFLY	GEAR	ACTIVITY PUMP THROTTLING
98	TUB.V.	---	VALVE VAULT WINTERIZATION
99	TUB.V.	---	GEYSER THROTTLING
100	TUB.V.	---	GEYSER THROTTLING
101	TUB.V.	---	GEYSER THROTTLING
102	TUB.V.	---	GEYSER THROTTLING
103	TUB.V.	---	GEYSER THROTTLING
104	BUTTERFLY	GEAR	WATER CURTAIN THROTTLING
105	BUTTERFLY	GEAR	UMBRELLA JET THROTTLING
106	TUB.V.	---	BOLLARD THROTTLING
107	TUB.V.	---	BOLLARD THROTTLING
108	TUB.V.	---	ARCH JET THROTTLING
109	TUB.V.	---	POOLS # FALLS THROTTLING
110	TUB.V.	---	TOT SLIDE THROTTLING

NOTES:  
 SEE PL.4.0 FOR EQUIPMENT LOCATIONS.  
 (3150 CONTRACTOR SHALL VERIFY)  
 EQUIPMENT PAD HEIGHTS WITH THE MANUFACTURER  
 INSTALLED BY GENERAL CONTRACTOR.  
 SUPPORT PIPES PER DETAIL 3/PL.4.0.  
 SEE DETAIL 2/PL.3.0 FOR REINFORCING @ PIPE  
 PENETRATIONS.  
 SEE PL.4.0 FOR CHEMICAL CONTROLLER LOCATION.  
 ARROWS DENOTE DIRECTION OF FLOW  
 THIS DRAWING FOR SCHEMATIC USE ONLY!  
 SEE SHEET PL.2.0 FOR CONTINUATION OF PIPING.  
 ALL EQUIPMENT TO BE MOUNTED ON HOUSEKEEPING PADS.  
 TO MATCH VALVE NUMBERS WITH CORRESPONDING  
 LOCATIONS AND QUANTITIES, REFER TO VALVE LEGEND  
 ON THIS PAGE.

\* FURNISHED WITH FILTER TUB.V. = TRUE UNION BALL VALVE  
 S.S.E.G. = SUBMERGED SERVICE EXTENDED GEAR  
 TUB.C. = TRUE UNION BALL CHECK  
 THE INTENT OF THIS VALVE LEGEND IS NOT TO INCLUDE OR ALL VALVES REQUIRED  
 FOR THIS PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE  
 ALL VALVES REQUIRED.

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/4/22
C	REVISED PER UPDATED INFORMATION	5/19/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

101 MCINLEY PARKWAY  
 DELAWARE, OH 43028  
 PHONE 937-345-5335  
 FAX 937-345-6444  
 www.aquatix.com

**aquatix**  
 by landscape structures

JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
 SPLASH PAD  
 LOCATION: MIAMISBURG, OH

EXISTING FILTRATION ISOMETRIC

CHECKED	DWG. FILE	DATE
	1156080-05-02-2	2/7/22
DRAWN	CTS	
SCALE	SEE VIEWS	

JOB NO.  
 1156080-05-02

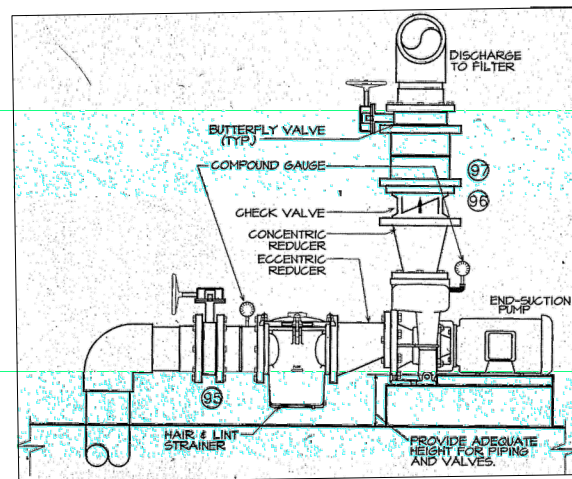
8-1  
 OF 13



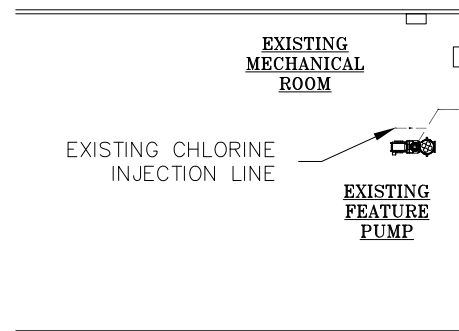
**APPROVED**

By Victor Nduaguba, PE at 7:36 am, Dec 16, 2022

10" PVC EXISTING FEATURE SUPPLY LINE FROM EXISTING FEATURE SUPPLY PUMP W/ CHLORINE INJECTOR CONTROLLED BY EXISTING CHEMICAL CONTROLLER. SEE SUPPLIED ORIGINAL POOL DRAWINGS FOR DETAILS AND SPECIFICATIONS.



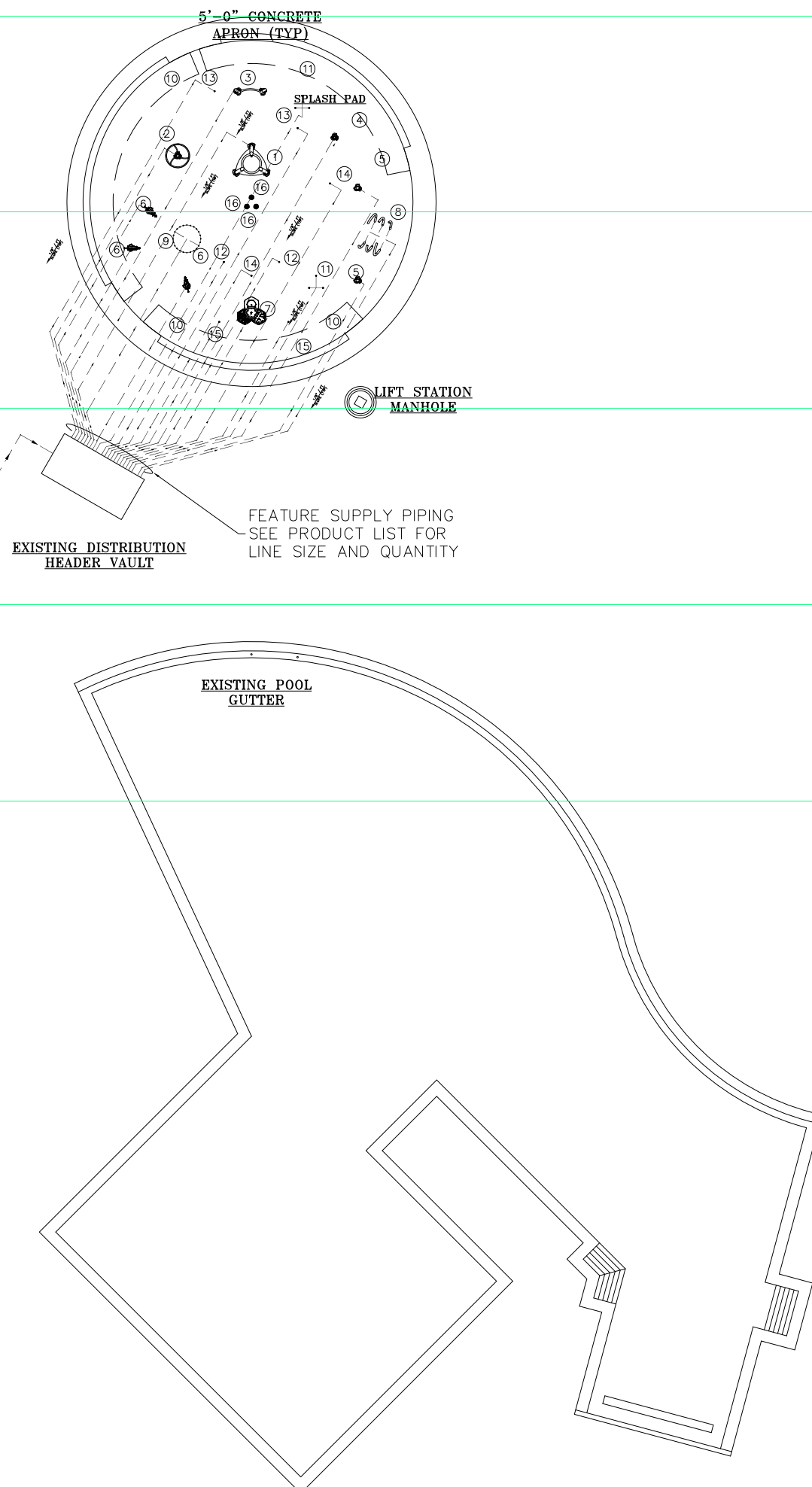
EXISTING FEATURE PUMP



EXISTING MECHANICAL ROOM

EXISTING CHLORINE INJECTION LINE

EXISTING FEATURE PUMP



EXISTING DISTRIBUTION HEADER VAULT

FEATURE SUPPLY PIPING SEE PRODUCT LIST FOR LINE SIZE AND QUANTITY

EXISTING POOL GUTTER

LIFT STATION MANHOLE

NO	PRODUCT	QTY	GPM	LINE SIZE
1	FLASHFLOOD	1	20	1 1/2"
2	HYDROHELIX	1	30	1 1/2"
3	WATERWAY	1	10	1"
4	SPRAYSTACKER	1	20	1 1/2"
5	SPRAYSHROUD	2	20 EA	1 1/2" EA
6	JETSTREAM	3	5 EA	1" EA
7	AQUAGATHER STATION	1	10	1"
8	WHIRLFLEX	1	30	1 1/2"
9	UPWARD SPRAY RING	1	110	4"
10	<del>TRIPLE ARCH JET</del>	<del>3</del>	<del>5 EA</del>	<del>1" EA</del>
11	STREAM JET TRIANGLE	2	15 EA	1 1/2" EA
12	CROWN JET	2	5 EA	1" EA
13	JR WATER JEWEL	2	7 EA	1" EA
14	MINI PILLAR	2	10 EA	1" EA
15	SEA CRAWLER	2	5 EA	1" EA
16	DRAIN BOX W/ STRAINER	3	175 EA MIN.	6" EA

- NOTE:
1. ALL SUPPLY AND DRAIN LINES TO SLOPE 1/8"/FT AWAY FROM SPLASH PAD.
  2. GRAVITY DRAIN LINE VELOCITY NOT TO EXCEED 3.0 FT/SEC.
  3. REFER TO SPEC SHEET AND INSTALLATION DRAWING FOR EACH PRODUCT.
  4. ALL PIPING SHOULD BE SCH 80 PVC.
  5. ALL LINES FROM PIPE MANIFOLDS TO FEATURES SHOULD NOT BE CROSSED.
  6. ANY REQUIRED BACKFLOW DEVICE OR WATER METER ON THE CITY WATER MAIN SHALL BE PROVIDED BY OWNER.
  7. EXACT ROUTING OF PIPING TO BE DETERMINED BY INSTALLING CONTRACTOR.
  8. INCOMING FRESH WATER SUPPLY TO BE PROVIDED WITH AN APPROVED REGULATOR SET TO 25-30PSI IN ACCORDANCE WITH LOCAL AND STATE CODES. (VERIFY LINE SIZE W/ MUNICIPALITY PRIOR TO CONSTRUCTION.)

LEGEND	
---	SUPPLY LINE
- - -	DRAIN LINE
- - -	SUCTION LINE
—	ELECTRICAL CONDUIT
⊗	MANUAL VALVE
▶	FLOW DIRECTION
⊗	ACTUATED VALVE

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/21/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

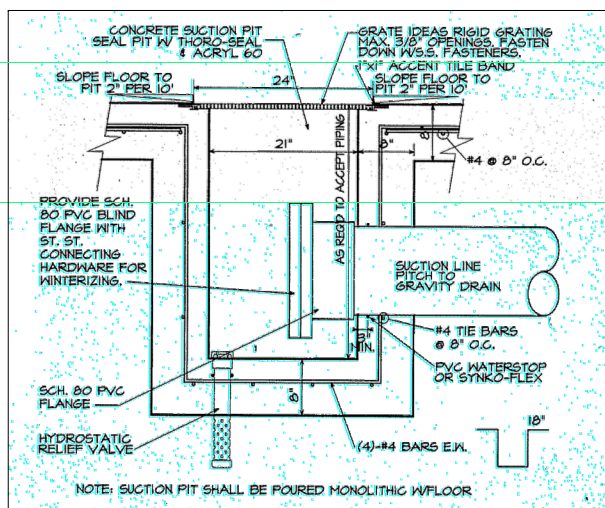
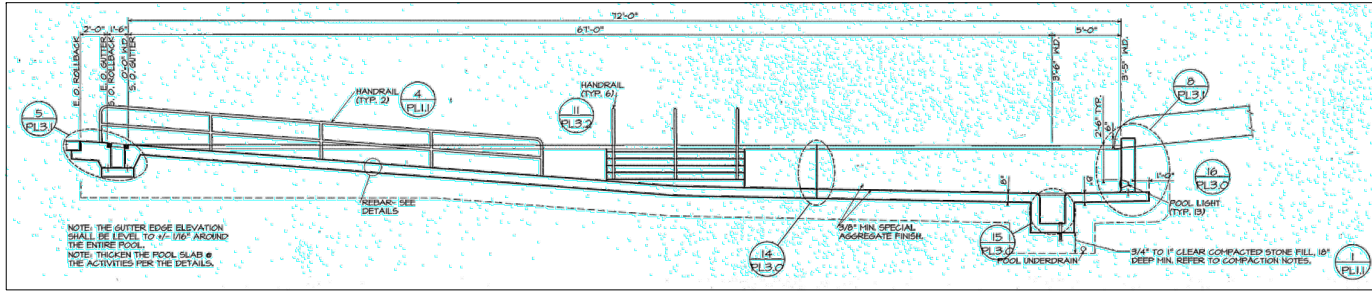
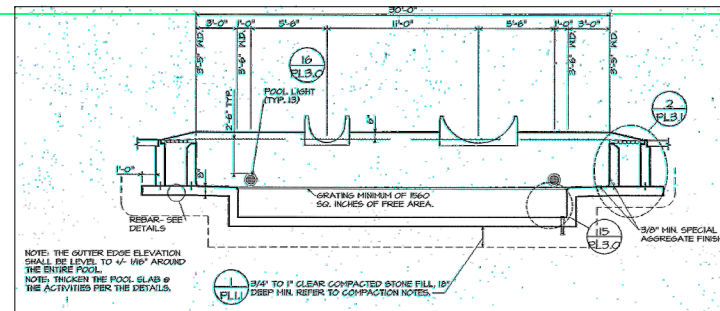
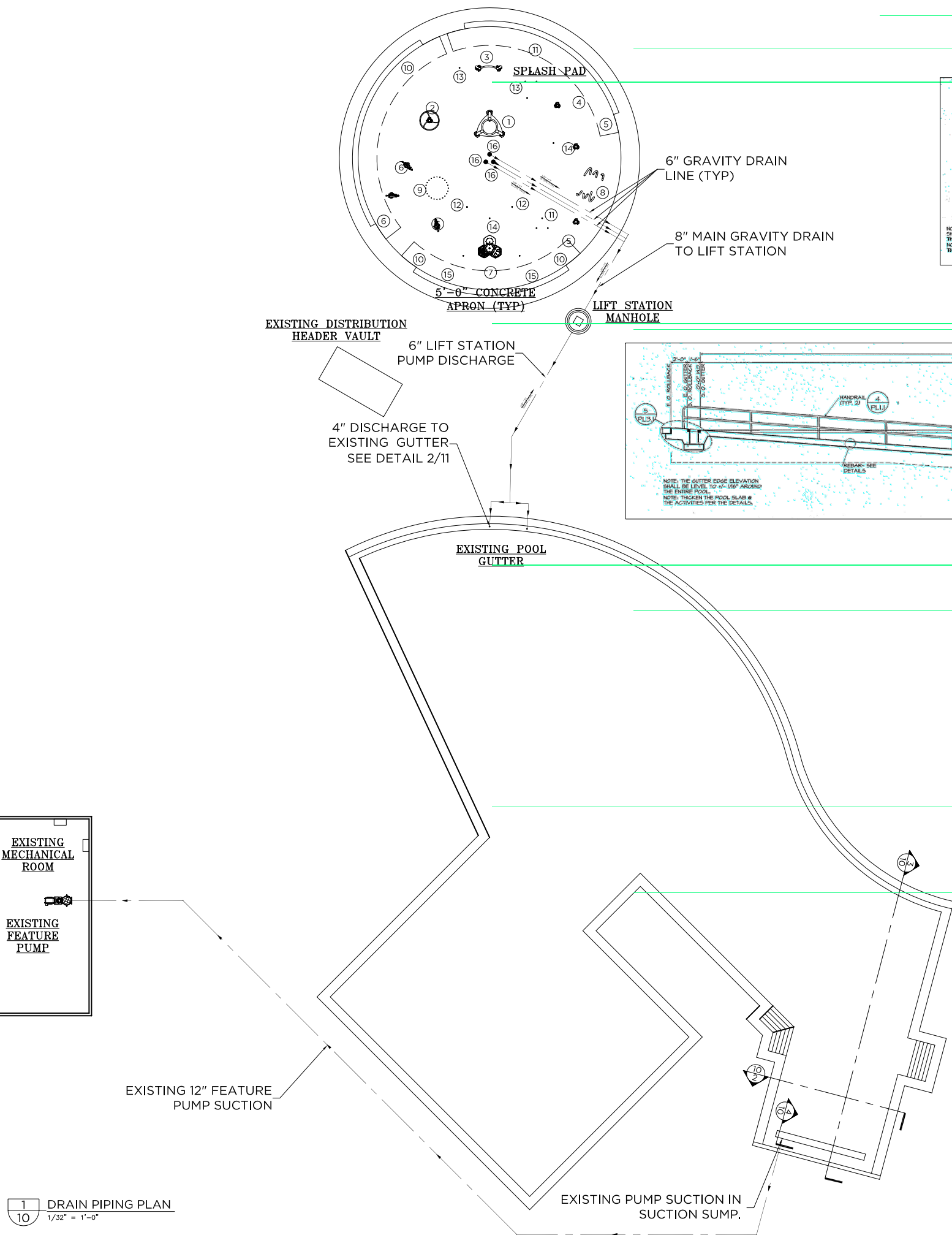
101 MCKINLEY PARKWAY  
DELAND, OH 43028  
LOCAL 935-244-5335  
FAX 935-244-6444  
aquatix@aquatix.com

**aquatix**  
by landscape structures

JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
SPLASH PAD  
LOCATION: MIAMISBURG, OH

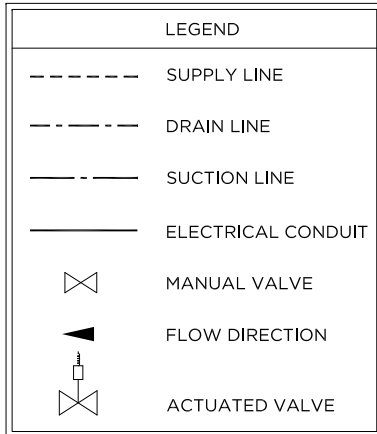
DATE: 2/7/22  
DWG. FILE: 1156080-05-02-7  
SHEET TITLE: SPLASH PAD SUPPLY PIPING PLAN  
JOB NO.: 1156080-05-02

9 OF 13



NO	PRODUCT	QTY	GPM	LINE SIZE
1	FLASHFLOOD	1	20	1 1/2"
2	HYDROHELIX	1	30	1 1/2"
3	WATERWAY	1	10	1"
4	SPRAYSTACKER	1	20	1 1/2"
5	SPRAYSHROUD	2	20 EA	1 1/2" EA
6	JETSTREAM	3	5 EA	1" EA
7	AQUAGATHER STATION	1	10	1"
8	WHIRLFLEX	1	30	1 1/2"
9	UPWARD SPRAY RING	1	110	4"
10	<del>TRIPLE ARCH JET</del>	<del>3</del>	<del>5 EA</del>	<del>1" EA</del>
11	STREAM JET TRIANGLE	2	15 EA	1 1/2" EA
12	CROWN JET	2	5 EA	1" EA
13	JR WATER JEWEL	2	7 EA	1" EA
14	MINI PILLAR	2	10 EA	1" EA
15	SEA CRAWLER	2	5 EA	1" EA
16	DRAIN BOX W/ STRAINER	3	175 EA MIN.	6" EA

- NOTE:
1. ALL GRAVITY DRAIN LINES TO SLOPE 1/8" / FT AWAY FROM SPLASH PAD.
  2. GRAVITY DRAIN LINE VELOCITY NOT TO EXCEED 3.0 FT/SEC
  3. REFER TO SPEC SHEET AND INSTALLATION DRAWING FOR EACH PRODUCT.
  4. ALL PIPING SHOULD BE SCH 80 PVC.
  5. ANY REQUIRED BACKFLOW DEVICE OR WATER METER ON THE CITY WATER MAIN SHALL BE PROVIDED BY OTHERS.
  6. EXACT ROUTING OF PIPING TO BE DETERMINED BY CONTRACTOR.
  7. MINIMIZE USE OF ELBOWS ON ALL DRAINAGE PIPING.
  8. COORDINATE (1/2") DRAIN LINES FROM POD EMBEDS TO DRAINAGE AREA.
  9. NO DIRECT CONNECTION ALLOW ON THE DRAIN TO WASTE LINES. AIR GAP REQUIRED.



EXISTING SUCTION SUMP 1'-9" W X 23'-9" L

TOTAL OPEN AREA THRU GRATE = 1,481 SQ. IN.

TOTAL FLOW FROM ALL PUMPS = 4,394 GPM.

VELOCITY THRU GRATE = 0.91 FT/SEC.

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/14/22
C	REVISED PER UPDATED INFORMATION	5/19/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

101 MCKINLEY PARKWAY  
DELANO, MN 55228  
Local 952-445-9335  
Fax 952-345-6444  
aquatix@aquatix.com

**aquatix**  
by landscape structures

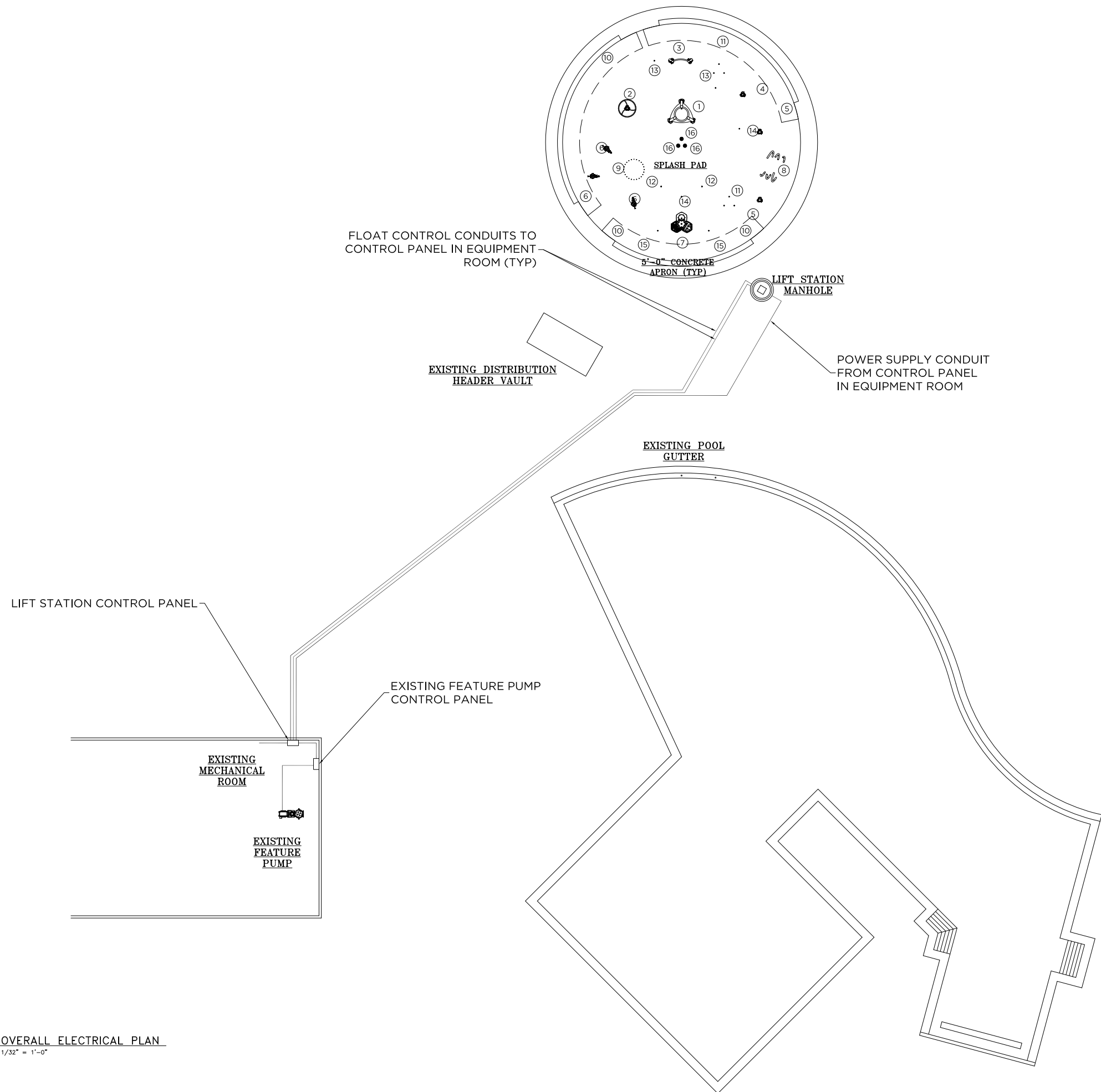
JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
SPLASH PAD  
LOCATION: MIAMISBURG, OH

DATE: 2/7/22  
DWG. FILE: 1156080-05-02-8  
CHECKED: SHEET TITLE: SPLASH PAD DRAIN PIPING PLAN  
DRAWN: CTS  
SCALE: SEE VIEWS

JOB NO. 1156080-05-02

**10**  
OF 13





NO	PRODUCT	QTY	GPM	LINE SIZE
1	FLASHFLOOD	1	20	1½"
2	HYDROHELIX	1	30	1½"
3	WATERWAY	1	10	1"
4	SPRAYSTACKER	1	20	1½"
5	SPRAYSHROUD	2	20 EA	1½" EA
6	JETSTREAM	3	5 EA	1" EA
7	AQUAGATHER STATION	1	10	1"
8	WHIRLFLEX	1	30	1½"
9	UPWARD SPRAY RING	1	110	4"
10	<del>TRIPLE ARCH JET</del>	<del>3</del>	<del>5 EA</del>	<del>1" EA</del>
11	STREAM JET TRIANGLE	2	15 EA	1½" EA
12	CROWN JET	2	5 EA	1" EA
13	JR WATER JEWEL	2	7 EA	1" EA
14	MINI PILLAR	2	10 EA	1" EA
15	SEA CRAWLER	2	5 EA	1" EA
16	DRAIN BOX W/ STRAINER	3	175 EA MIN.	6" EA

**NOTE:**

- REFER TO SPEC SHEET AND INSTALLATION DRAWING FOR EACH PRODUCT.
- WIRING FROM THE CONTROLLER TO THE ACTIVATION BOLLARD SHALL BE #14 AWG, (3) CONDUCTORS TOTAL.
- ALL CONNECTIONS TO THE CONTROLLER SHALL BE PERFORMED USING AN APPROVED NEMA 4X CONNECTOR.
- EXACT ROUTING OF WIRING TO BE DETERMINED BY CONTRACTOR.
- PROVIDE BOND WIRES FOR REBAR PER LOCAL AND STATE CODES.
- ALL STAINLESS STEEL STRUCTURES REQUIRE ONDING PER NEC AND LOCAL CODES

LEGEND	
---	SUPPLY LINE
- - -	DRAIN LINE
- · - · -	SUCTION LINE
—	ELECTRICAL CONDUIT
⊗	MANUAL VALVE
▶	FLOW DIRECTION
⊗	ACTUATED VALVE

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/7/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

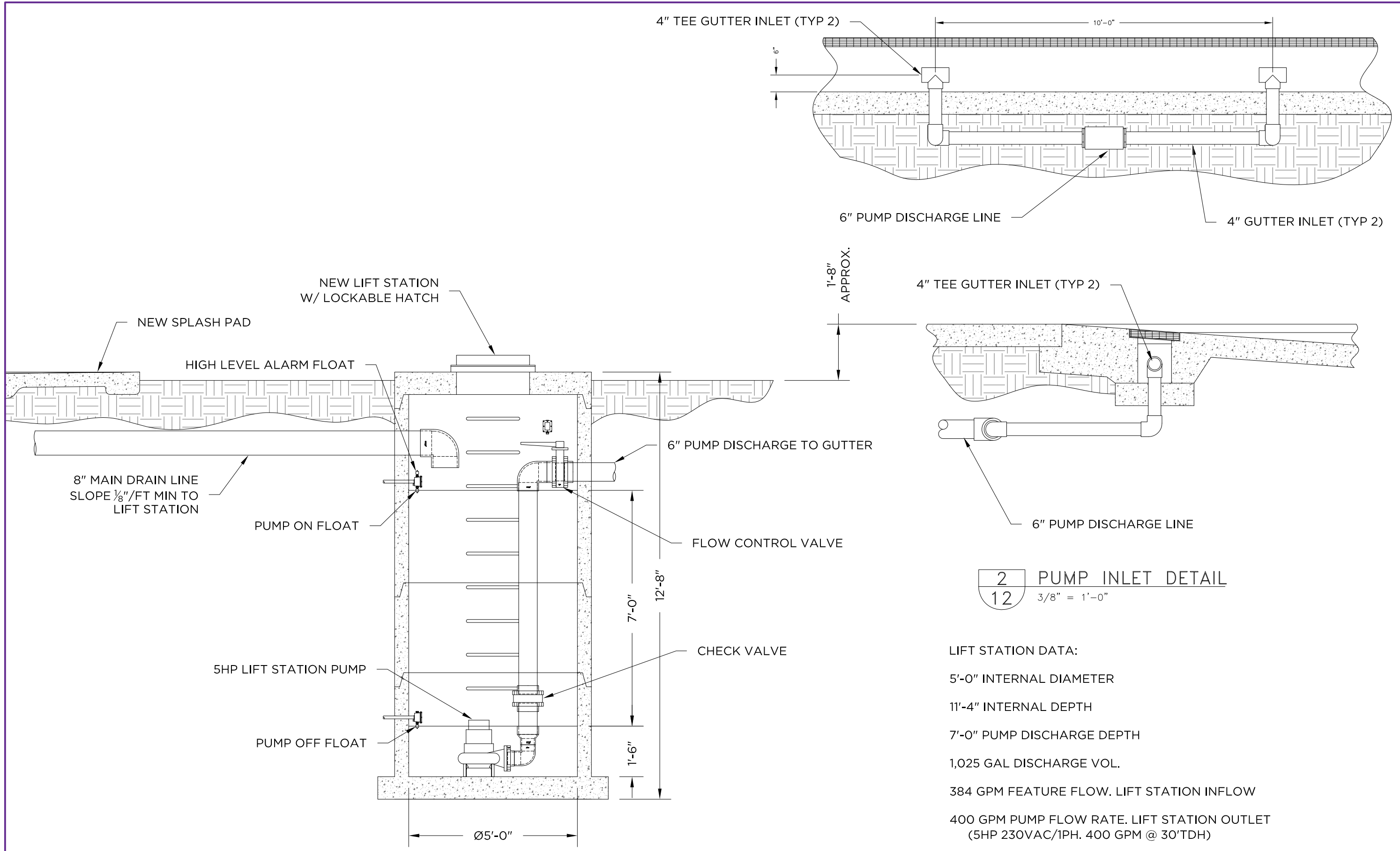
101 MCKINLEY PARKWAY  
DELANO, MN 55328  
LOCAL 952-245-5335  
FAX 952-245-6444  
aquatix@aquatix.com

**aquatix**  
by landscape structures

JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
SPLASH PAD  
LOCATION: MIAMISBURG, OH

SCALE: SEE VIEWS  
DRAWN: CTS  
CHECKED: DWG. FILE: 1156080-05-02-9  
DATE: 2/7/22  
SHEET TITLE: SPLASH PAD ELECTRICAL PLAN  
JOB NO.: 1156080-05-02

11 OF 13



**1**  
12 LIFT STATION MANHOLE DETAIL  
3/8" = 1'-0"

**2**  
12 PUMP INLET DETAIL  
3/8" = 1'-0"

LIFT STATION DATA:  
 5'-0" INTERNAL DIAMETER  
 11'-4" INTERNAL DEPTH  
 7'-0" PUMP DISCHARGE DEPTH  
 1,025 GAL DISCHARGE VOL.  
 384 GPM FEATURE FLOW. LIFT STATION INFLOW  
 400 GPM PUMP FLOW RATE. LIFT STATION OUTLET  
 (5HP 230VAC/1PH. 400 GPM @ 30'TD)  
 TIME TO EMPTY LIFT STATION WHILE FEATURE PUMP IS  
 RUNNING = 64 MIN.  
 TIME TO EMPTY LIFT STATION WHILE FEATURE PUMP IS  
 OFF = 2.6 MIN.

NO.	REVISION	DATE
A	RELEASE FOR APPROVAL	2/9/22
B	REVISED PER HEALTH DEPARTMENT REVIEW	4/4/22
C	REVISED PER UPDATED INFORMATION	5/18/22
D	COMBINED ORIGINAL AND NEW DRAWINGS	6/14/22
E	ADDED 5' BUFFER ZONE	11/30/22

101 MCINLEY PARKWAY  
 DELANO, MN 55328  
 P 952-345-8335  
 F 952-345-6444  
 aquatix@aquatix.com

**aquatix**  
 by landscape structures

JOB TITLE	SYCAMORE TRAILS AQUATIC CENTER SPLASH PAD
LOCATION	MIAMISBURG, OH

SCALE	DRAWN	CHECKED	DWG. FILE	DATE
SEE VIEWS	CTS		1156080-05-02-1	2/7/22

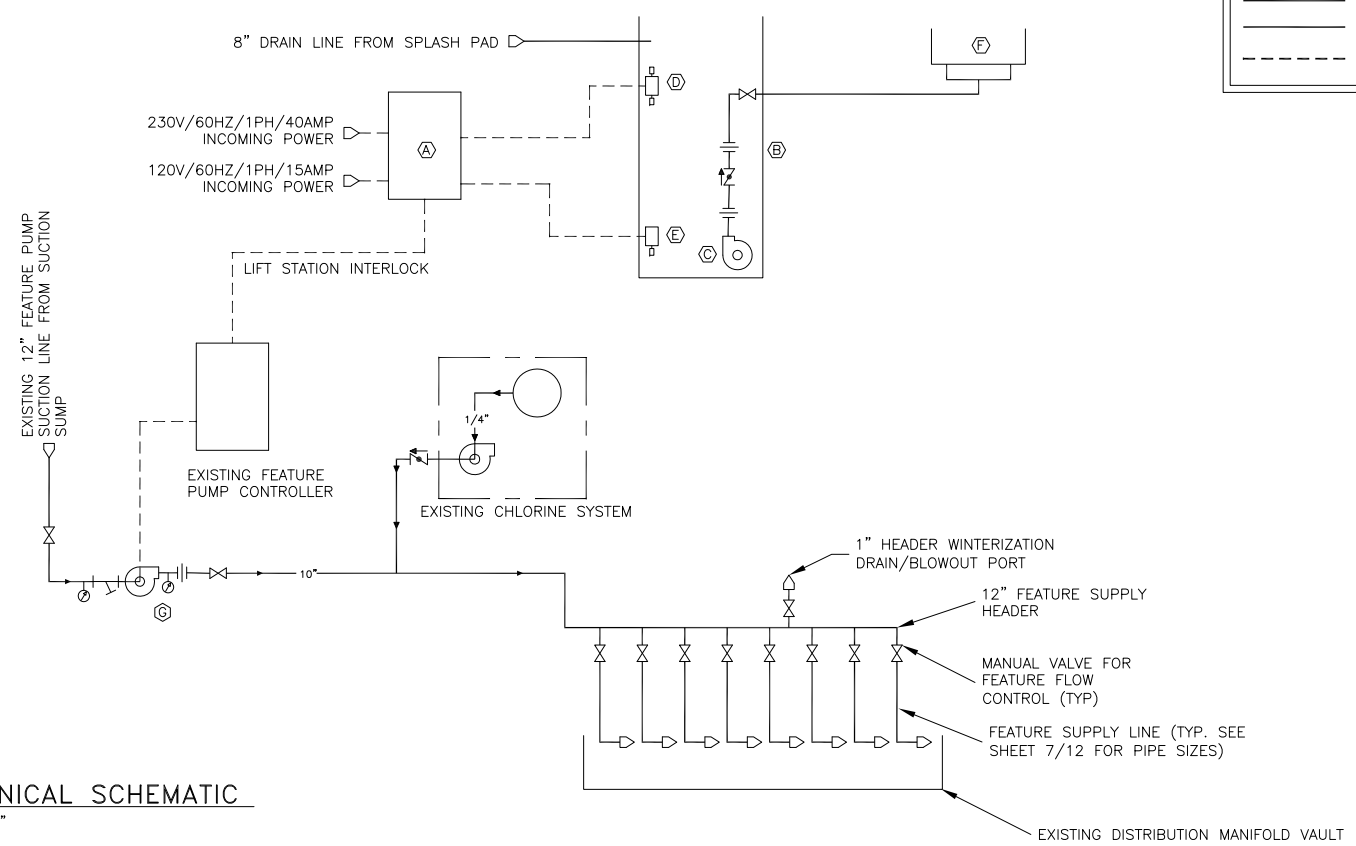
SPLASH PAD MECHANICAL DETAILS

JOB NO.  
1156080-05-02

**12**  
OF 13



- NOTE:
1. ALL GRAVITY DRAIN LINES TO SLOPE 1/8"/FT AWAY FROM SPLASH PAD.
  2. GRAVITY DRAIN LINE VELOCITY NOT TO EXCEED 3.0 FT/SEC.
  3. REFER TO SPEC SHEET AND INSTALLATION DRAWING FOR EACH PRODUCT.
  4. LOCATION AND SIZE OF UNDERGROUND STORAGE TANK NOT TO SCALE.
  5. ALL PIPING BETWEEN COLLECTOR BOXES, UNDERGROUND STORAGE TANK, AND OPERATING SYSTEM SHOULD BE SCH 80 PVC.
  6. ALL LINES FROM PIPE MANIFOLDS TO FEATURES SHOULD NOT BE CROSSED.
  7. ANY REQUIRED BACKFLOW DEVICE OR WATER METER ON THE CITY WATER MAIN SHALL BE PROVIDED BY OTHERS.
  8. EXACT ROUTING OF PIPING TO BE DETERMINED BY CONTRACTOR.
  9. UNDERGROUND STORAGE TANK AND ALL EQUIPMENT MUST BE SECURE TO PREVENT UNAUTHORIZED ACCESS.
  10. ◀ INDICATES FLOW DIRECTION.



PIPING LEGEND	
	FEATURE SUPPLY PIPE
	FEATURE SUCTION PIPE
	ELECTRICAL CONDUIT

SYMBOL LEGEND	
	PUMP
	GATE VALVE
	SOLENOID VALVE
	CHEM FEEDER
	SHUT-OFF VALVE
	MANUAL AIR VENT
	PSI/VACUUM GAUGE
	FILTER
	STRAINER
	UNION
	CHECK VALVE
	INLET - OUTLET

FEATURE EQUIPMENT		
ITEM#	DESCRIPTION:	TOTAL QTY:
A	SPLASH PAD CONTROL PANEL	1
B	PRECAST CONCRETE MANHOLE	1
C	5HP 230/60/1PH SUBMERSIBLE LIFT STATION PUMP	1
D	PUMP CONTROL FLOATS	1
E	PUMP CONTROL FLOAT PUMP OFF	1
F	EXISTING POOL GUTTER W/ NEW RETURNS	1
G	EXISTING FEATURE PUMP	1

**1** MECHANICAL SCHEMATIC  
**13** 1/2" = 1'-0"

101 HAINLEY PARKWAY  
 DELAWARE, PA 19828  
 Phone: 302-245-4535  
 Fax: 302-245-6444  
 aquatix@atix.com

**aquatix**  
 by landscape structures

JOB TITLE: SYCAMORE TRAILS AQUATIC CENTER  
 SPLASH PAD  
 LOCATION: MIAMISBURG, OH

SCALE: SEE VIEWS  
 DRAWN: CTS  
 CHECKED: 1156080-05-02-13  
 SHEET TITLE: SPLASH PAD MECHANICAL SCHEMATIC

NO. REVISION DATE  
 A RELEASE FOR APPROVAL 2/9/22  
 B REVISED PER HEALTH DEPARTMENT REVIEW 4/14/22  
 C REVISED PER UPDATED INFORMATION 5/18/22  
 D COMBINED ORIGINAL AND NEW DRAWINGS 6/14/22  
 E ADDED 5' BUFFER ZONE 11/30/22

JOB NO. 1156080-05-02

**13**  
 OF 13