

McDONALD PARK SPLASH PAD FOR THE TOWN OF LAKEVIEW



AREA MAP
N.T.S.

LEGEND

EXISTING	
CONCRETE	
GRASS	
FENCE	
WATER LINE	
PROPOSED	
CONCRETE	
TURF	
WATER LINE	

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	HOR	HORIZONTAL	REQ'D	REQUIRED
AD	AREA DRAIN	HP	HIGH POINT	RP	RADIUS POINT
ADA	AMERICAN DISABILITIES ACT	ID	INSIDE DIAMETER	ROW	RIGHT-OF-WAY
ALIGN	ALIGNMENT	IE	INVERT ELEVATION	S	SOUTH
BFPD	BACKFLOW PREVENTION DEVICE	L	LEFT (REFERRING TO OFFSETS)	SD	STORM DRAIN LINE
BOC	BACK OF CURB (TOP)	LF	LINEAR FEET	SDCB	STORM DRAIN CATCH BASIN
BVCE	BEGIN VERTICAL CURVE ELEVATION	MIN	MINIMUM	SDCI	STORM DRAINAGE CURB INLET
		MH	MANHOLE	SDMH	STORM DRAINAGE MANHOLE
BVCS	BEGIN VERTICAL CURVE STATION	MJ	MECHANICAL JOINT (WATER PIPES)	SE	SOUTHEAST
CATV	CABLE TELEVISION			SF	SQUARE FEET
CB	CATCH BASIN	MUTCD	MANUAL UNIFORM TRAFFIC CONTROL DEVICES	SQ	SQUARE
CL	CENTERLINE	N	NORTH	SS	STAINLESS STEEL
CL	CLASS	NE	NORTHEAST	SSCO	SANITARY SEWER CLEANOUT
CO	CLEANOUT	NFL	NOT FIELD LOCATED	SSMH	SANITARY SEWER MANHOLE
CLR	CLEARANCE	NPT	NATIONAL PIPE THREAD TAPER	SSMH	SANITARY SEWER MANHOLE
CSDN	CITY STANDARD DRAWING NUMBER	NTS	NOT TO SCALE	STA	STATION
CU	COPPER	NW	NORTHWEST	SW	SOUTHWEST
DI	DUCTILE IRON (WATER PIPE)	OC	ON CENTER	TBM	TEMPORARY BENCHMARK
E	EAST	OCEW	ON CENTER EACH WAY	TC	TOP OF CURB
EG	EXISTING GRADE	OD	OUTSIDE DIAMETER	TG	TOP OF GRATE
ELEV	ELEVATION	PC	POINT OF CURVATURE	TS	TOP OF SLAB
EP	EDGE OF PAVEMENT	PCC	POINT OF COMPOUND CURVATURE	TW	TOP OF WALL
EPDM	ETHYLENE PROPYLENE DIENE MONOMER	P.C.C.	PORTLAND CEMENT CONCRETE	TYP	TYPICAL
		PE	POLYETHYLENE	UNK	UNKNOWN
EVCE	END VERTICAL CURVE ELEV.	P.E.	PLAIN END	VC	VERTICAL CURVE
EVCS	END VERTICAL CURVE STA EXISTING	PSAR	PUBLIC SIDEWALK ACCESS RAMP	VCP	VITRIFIED CLAY PIPE
EX	EXISTING	PSI	POUNDS PER SQUARE INCH	VER	VERTICAL
F	FLANGED (WATER FITTINGS)	PT	POINT OF TANGENCY	W	WEST
FF	FINISH FLOOR ELEVATION	PUE	PUBLIC UTILITY EASEMENT	W/	WITH
FG	FINISH GRADE	PVC	POLYVINYL CHLORIDE	WL	WATER LINE
FH	FIRE HYDRANT ASSEMBLY	PVI	POINT OF VERTICAL INTERSECTION	XING	CROSSING
FL	FLOW LINE	PWES	PUBLIC WORKS ENGINEERING STANDARDS		
GA	GAUGE				
GRD	GRADE				
GV	GATE VALVE	R	RIGHT (REFERRING TO OFFSETS)		
HDPE	HIGH DENSITY POLYETHYLENE	RAD	RADIUS		

PROJECT CONTACT INFORMATION

CIVIL ENGINEER & SURVEYOR
 DAN SCALAS, P.E. & C.W.R.E.
 ADKINS ENGINEERING AND SURVEYING
 1435 ESPLANADE AVENUE
 KLAMATH FALLS, OR 97601
 (541) 884-4666

CITY OFFICIALS

MAYOR
 RAY TURNER

CITY COUNCIL MEMBERS
 SANDY WENZEL
 JAY FARMEN
 SHANNON THEALL
 CHARLEY TRACY

CITY MANAGER
 MICHELE PARRY

PUBLIC WORKS DIRECTOR
 JEFF MARSHALL

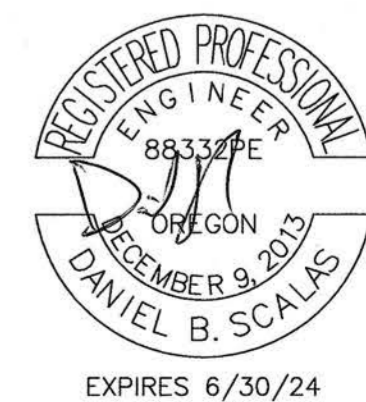
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S1	STRUCTURAL PLAN
S2	STRUCTURAL GENERAL NOTES
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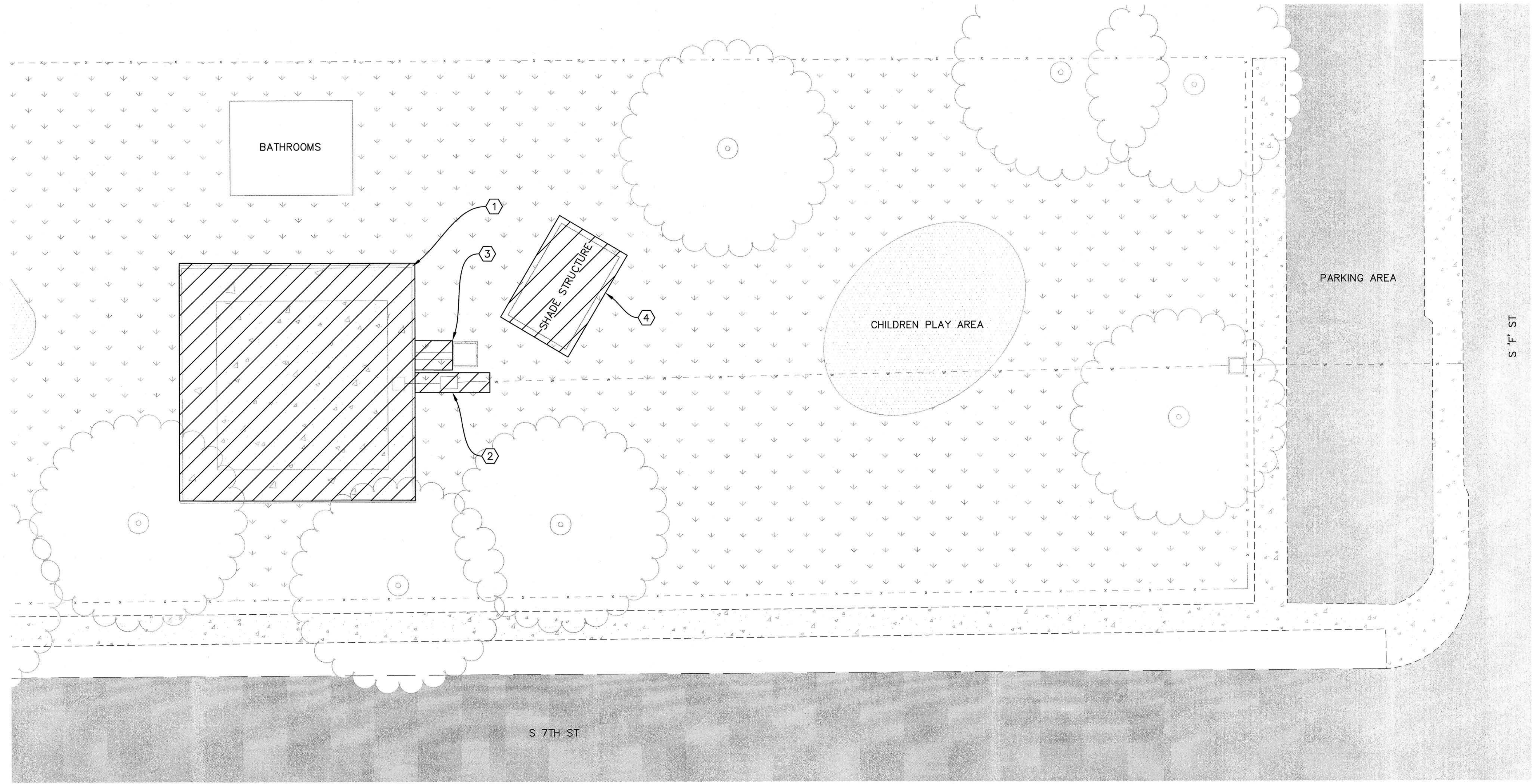
McDONALD PARK SPLASH PAD
 FOR THE
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 COVER

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DATE:	03-24-22
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SCALE:	AS SHOWN
SHEET:	1 OF 10

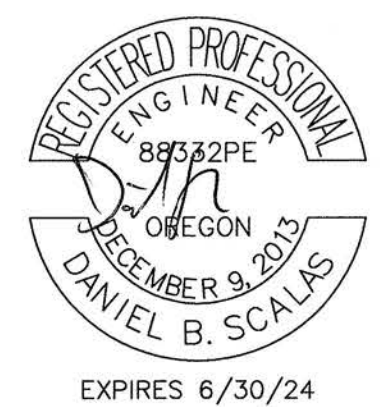
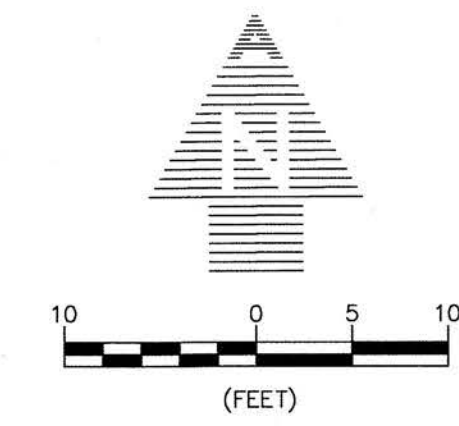


C1



CONSTRUCTION NOTES

- ① DEMO WADING POOL AND SURROUNDING CURB
- ② DEMO VALVE BOX AND WATER LINE
- ③ DEMO WATER RECIRCULATION LINES, SEE SHEET C3
- ④ DEMO EXISTING SHADE STRUCTURE AND CONCRETE PAD



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**McDONALD PARK SPLASH PAD
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 TOWN OF LAKEVIEW**

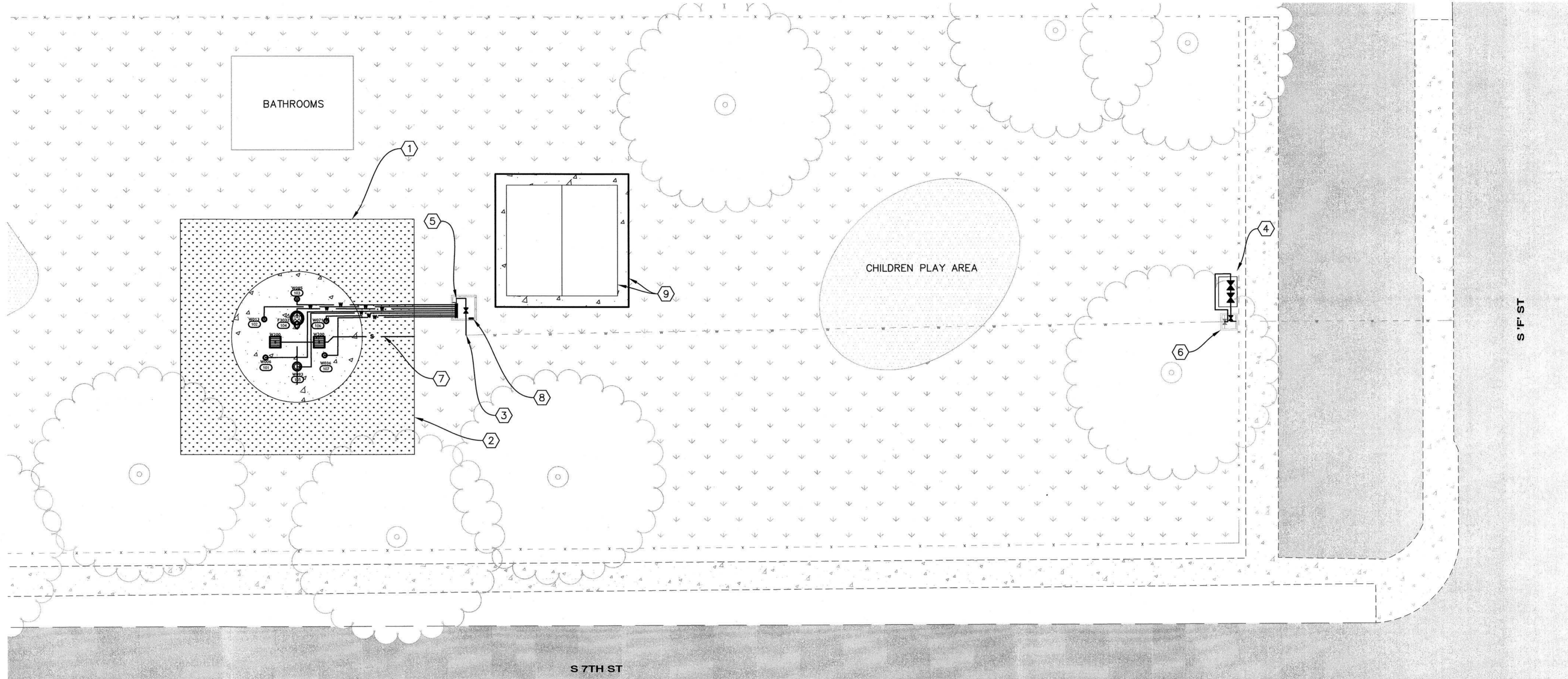
SITE DEMOLITION 1

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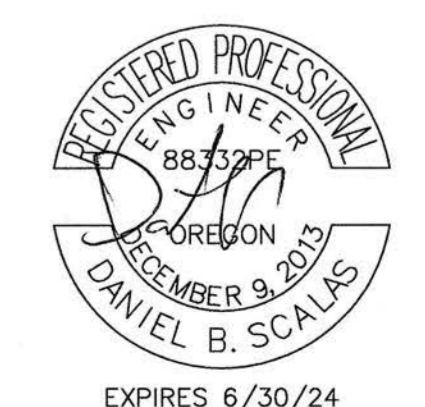
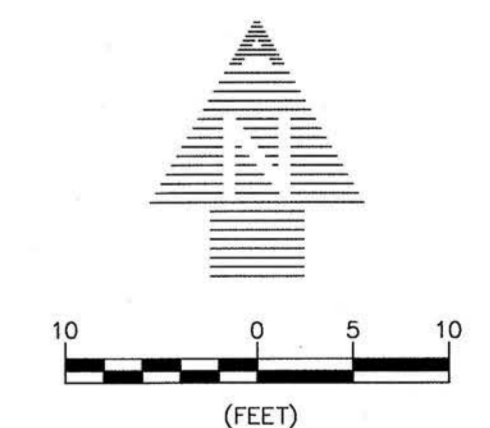
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C2



CONSTRUCTION NOTES

- ① INSTALL SPLASH PAD ON 23'-7" DIAMETER CONCRETE PAD THAT MATCHES EXISTING GRADE. REFER TO SHEET S1 FOR CONCRETE AND REINFORCEMENT REQUIREMENTS.
- ② INSTALL TURF AROUND THE SPLASH PAD IN THE AREA THAT WAS LEFT BY THE WADING POOL WITH NATIVE GRASS SPECIES.
- ③ INSTALL CONTROL STATION AND NEW VALVES IN EXISTING VAULT. INCOMING WATER SHALL CONNECT TO EXISTING WATER LINE AND BE ROUTED TO EXISTING VAULT.
- ④ INSTALL NEW VALVE BOX AND REDUCED PRESSURE BACK FLOW PREVENTION DEVICE SEE DETAIL 1, SHEET C5.
- ⑤ SPLASH PAD NEW VALVE SETUP SEE DETAIL 2, SHEET C5.
- ⑥ EXISTING SERVICE CONNECTION VAULT SEE DETAIL 3, SHEET C5.
- ⑦ CONNECT SPLASH PAD DRAIN TO THE EXISTING DRAIN FROM THE WADING POOL.
- ⑧ CONTRACTOR TO VERIFY THAT THE POWER SOURCE IS SUFFICIENT PER WATER ODYSSEY REQUIREMENTS.
- ⑨ INSTALL SHADE STRUCTURE AND ASSOCIATED CONCRETE PAD PER STRUCTURAL SHEETS.



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**McDONALD PARK SPLASH PAD
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SITE PLAN

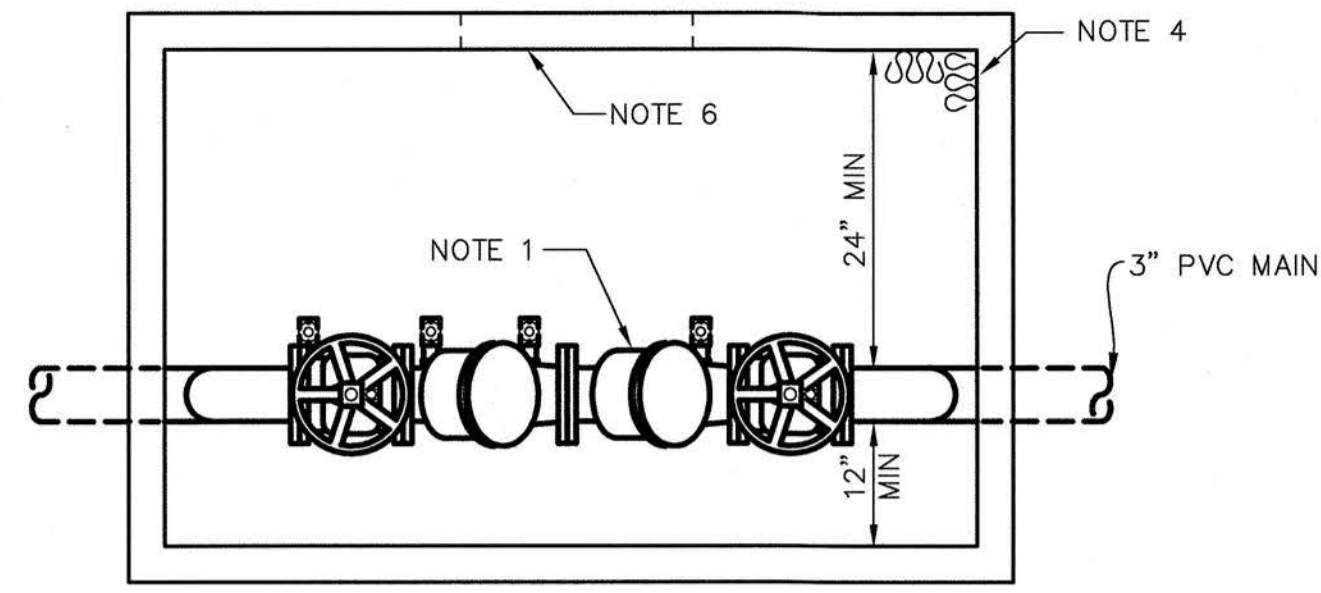
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SHEET:	4 OF 10

C4

EXPIRES 6/30/24



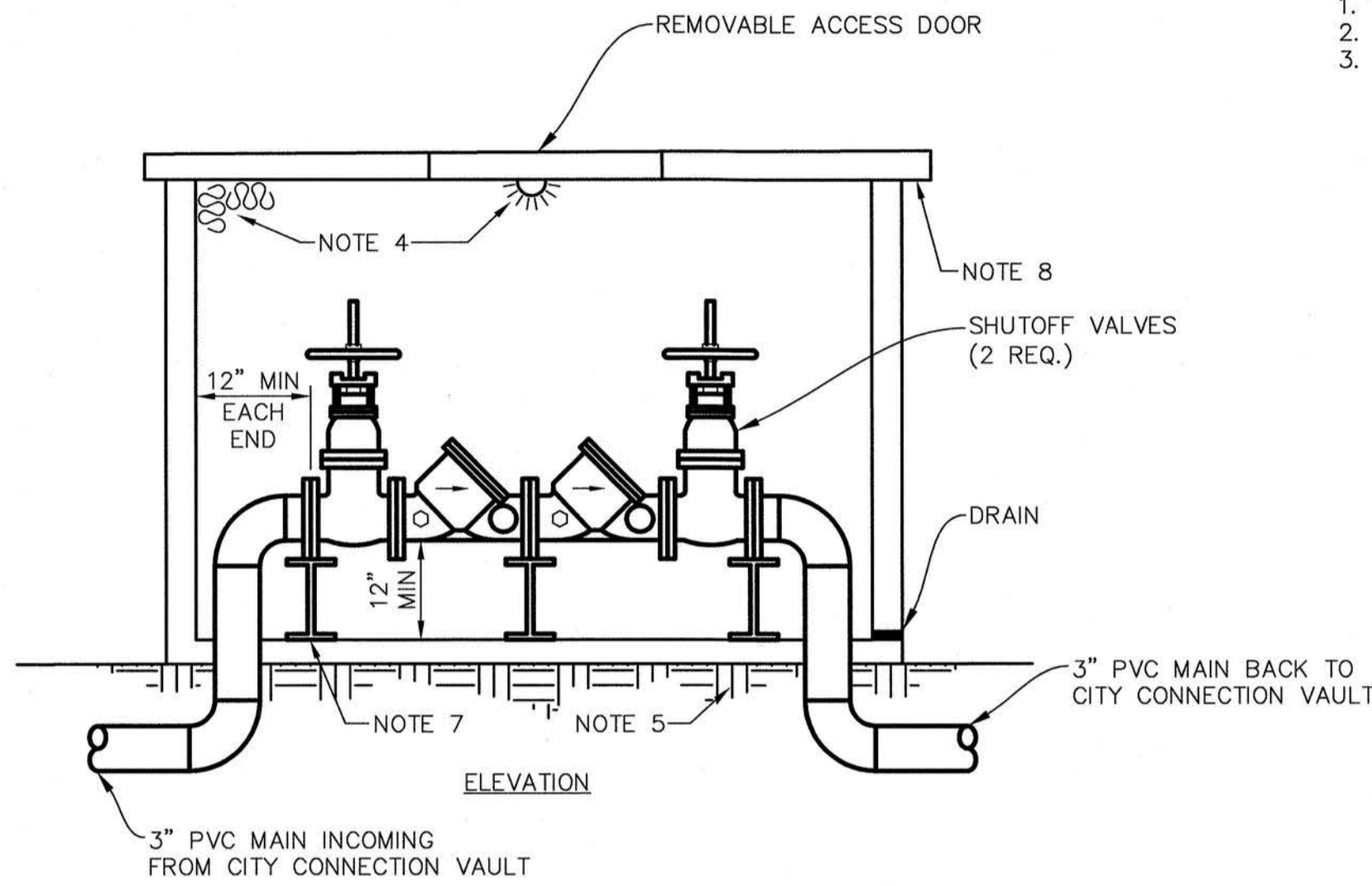
PLAN

NOTES

1. DOUBLE CHECK VALVE ASSEMBLY SHALL BE INSTALLED IN A LOCATION APPROVED BY FOR THE RESPECTIVE SERVICE AREA.
2. DOUBLE CHECK VALVE ASSEMBLY MAY BE INSTALLED VERTICALLY, PROVIDED THAT THE ASSEMBLY:
 - A. IS RECOMMENDED BY THE MANUFACTURER FOR VERTICAL INSTALLATION
 - B. IS INSTALLED IN AN ORIENTATION AS LISTED IN THE CURRENT "APPROVED BACKFLOW ASSEMBLY LIST" (OREGON DEPARTMENT OF HUMAN SERVICES, 503-731-4007).
3. ALL CLEARANCES APPLY TO OUTSIDE, IN-BUILDING, AND VERTICAL INSTALLATIONS.
4. INSULATION-FREEZE PROTECTION TO BE INSULATION AND/OR HEAT SOURCE TO KEEP ENCLOSURES AT A MINIMUM TEMPERATURE OF 40°F (NFPA 13-4-5.4.1.1).
5. UNDISTURBED BASE.
6. A DOOR OR OTHER ACCESS SHALL BE PROVIDED.
7. ALL ASSEMBLIES 2½" AND LARGER SHALL HAVE FLANGE SUPPORTS.
8. ALL STRUCTURES TO COMPLY WITH LOCAL CODES.

AS REQUIRED BY OAR 333-061-0070 AND THE OREGON PLUMBING SPECIALTY CODE, AN INITIAL TEST PERFORMED BY A STATE CERTIFIED BACKFLOW ASSEMBLY TESTER IS REQUIRED AT THE TIME OF INSTALLATION, WITH COPIES FURNISHED TO:

1. THE OWNER
2. THE WATER SUPPLIER
3. THE BUILDING OFFICIAL



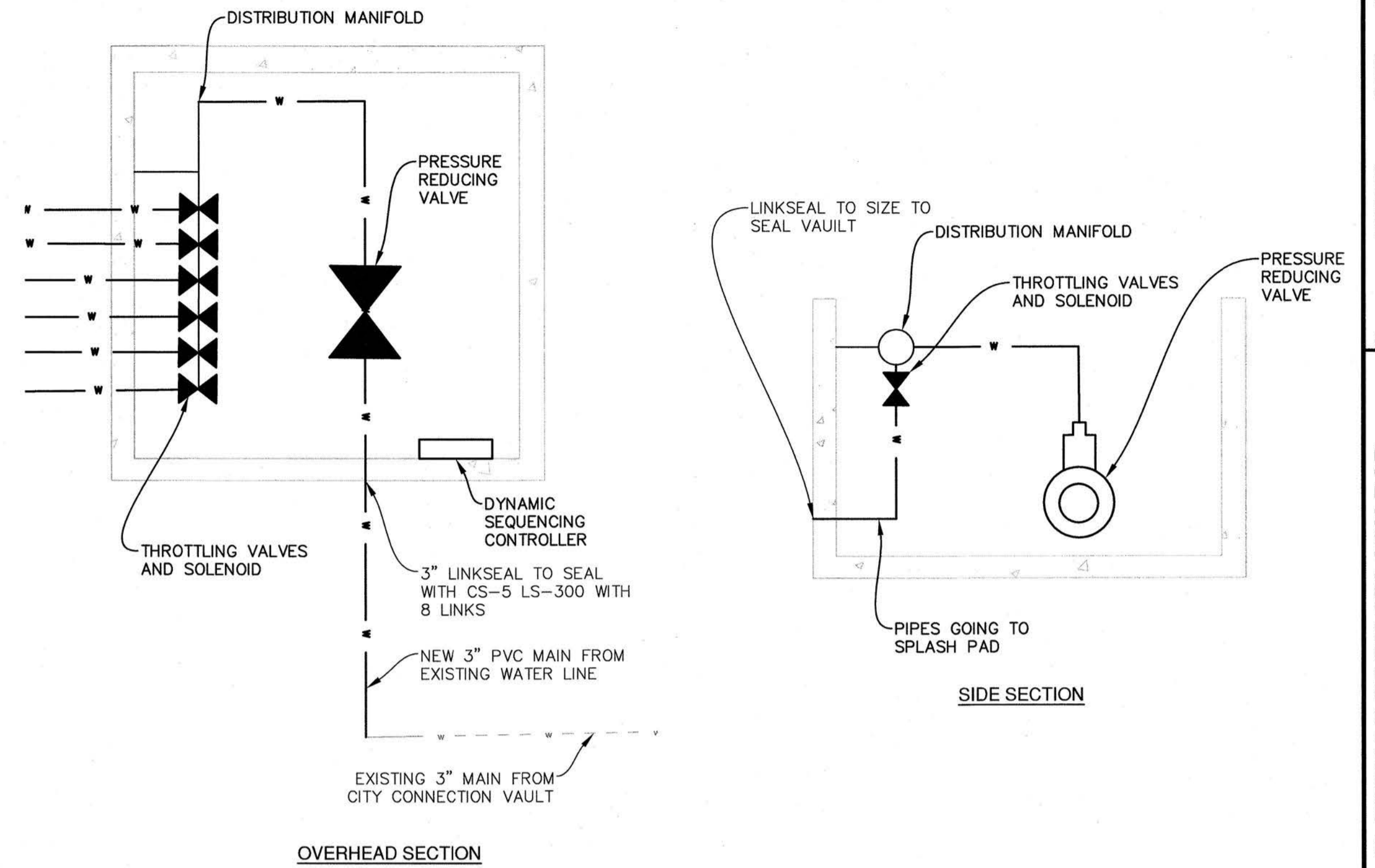
ELEVATION

1
5 N.T.S.

REDUCED PRESSURE BACKFLOW DEVICE

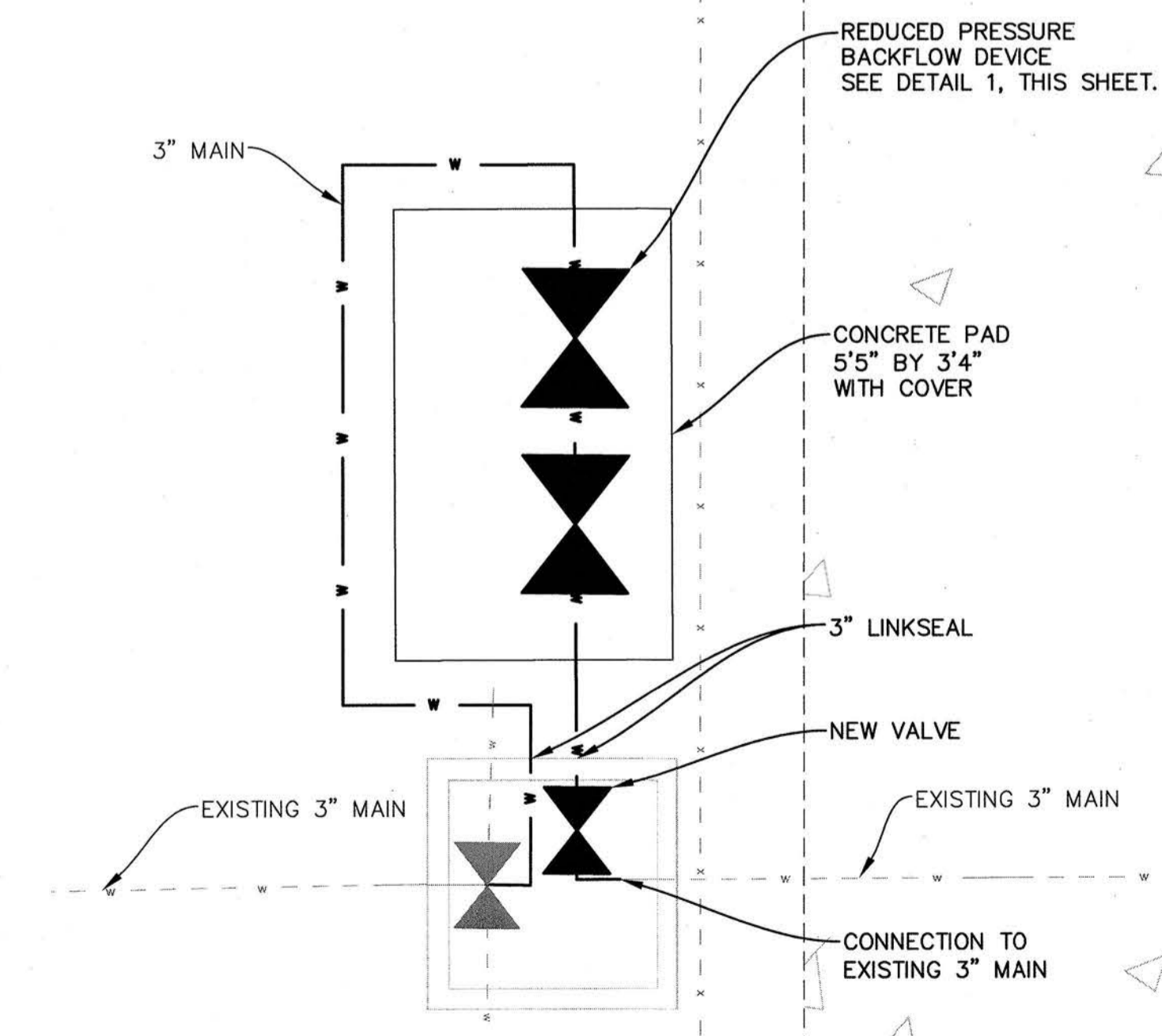
2
5 N.T.S.

NEW SPLASH PAD VALVE SET UP



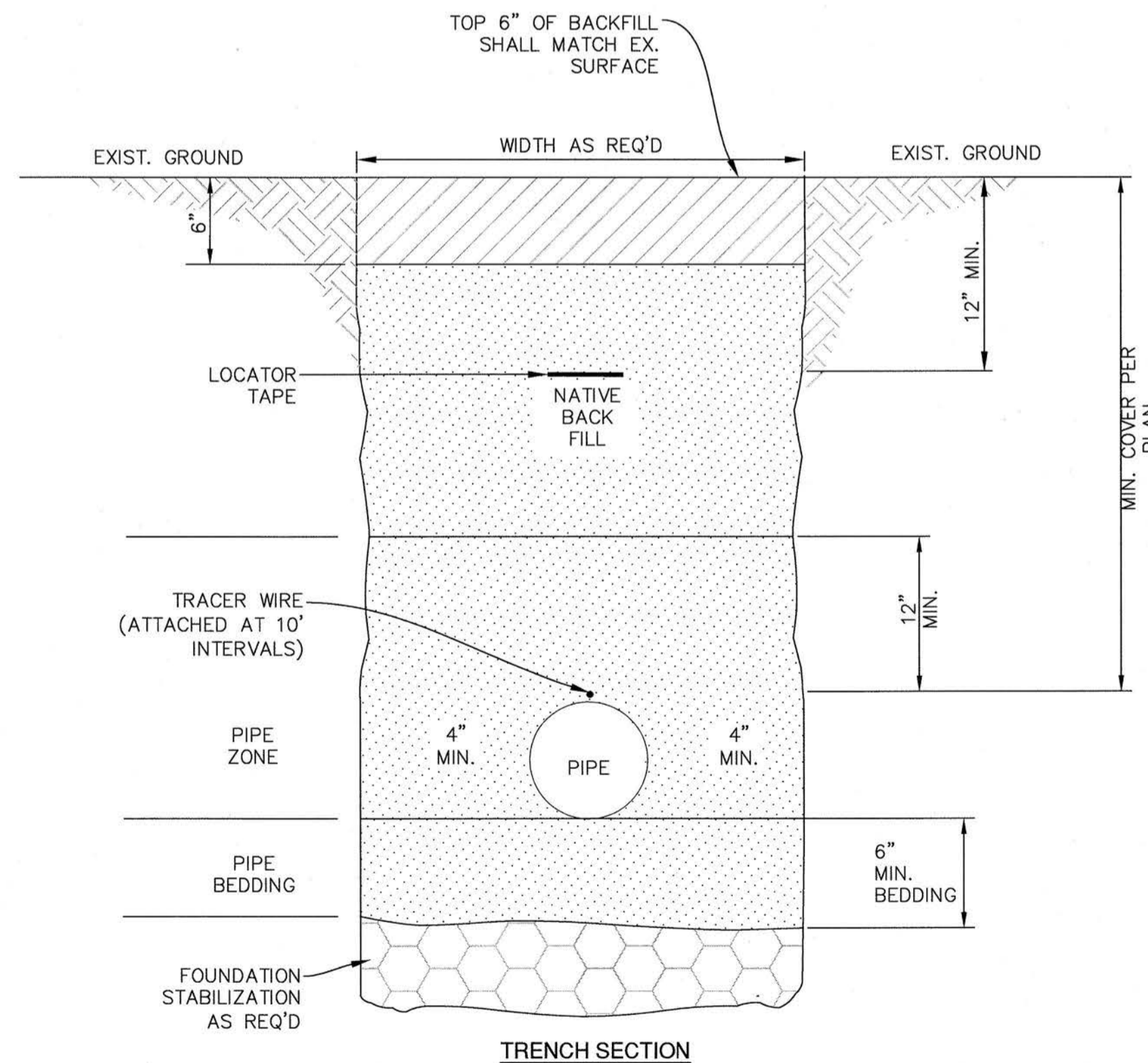
OVERHEAD SECTION

SIDE SECTION



3
5 N.T.S.

EXISTING SERVICE CONNECTION AND NEW VALVE BOX



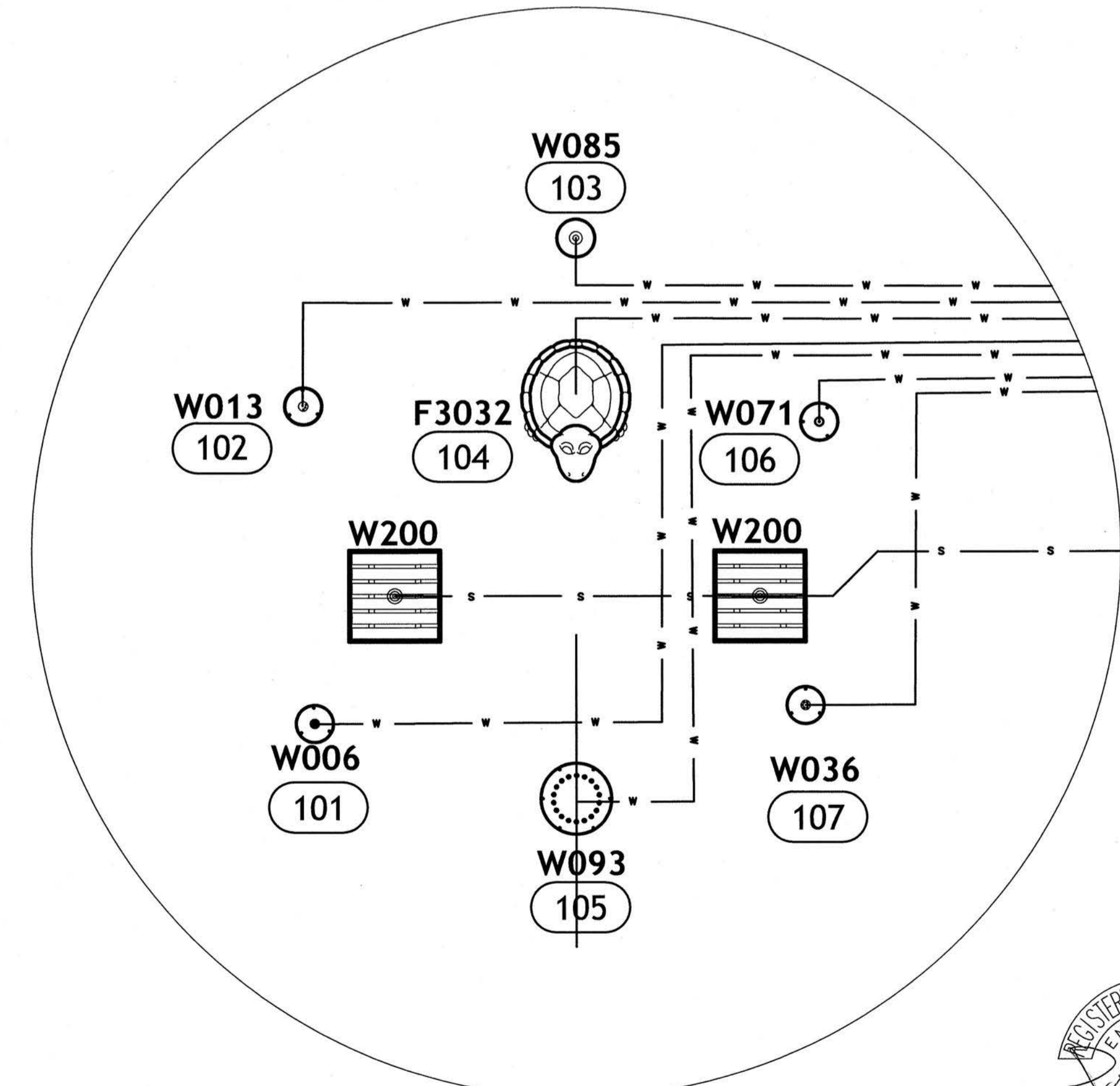
TRENCH SECTION

4
5 N.T.S.

NATIVE TRENCH

5
5 N.T.S.

WATER EQUIPMENT DIAGRAM



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McDONALD PARK SPLASH PAD FOR THE TOWN OF LAKEVIEW

DETAILS

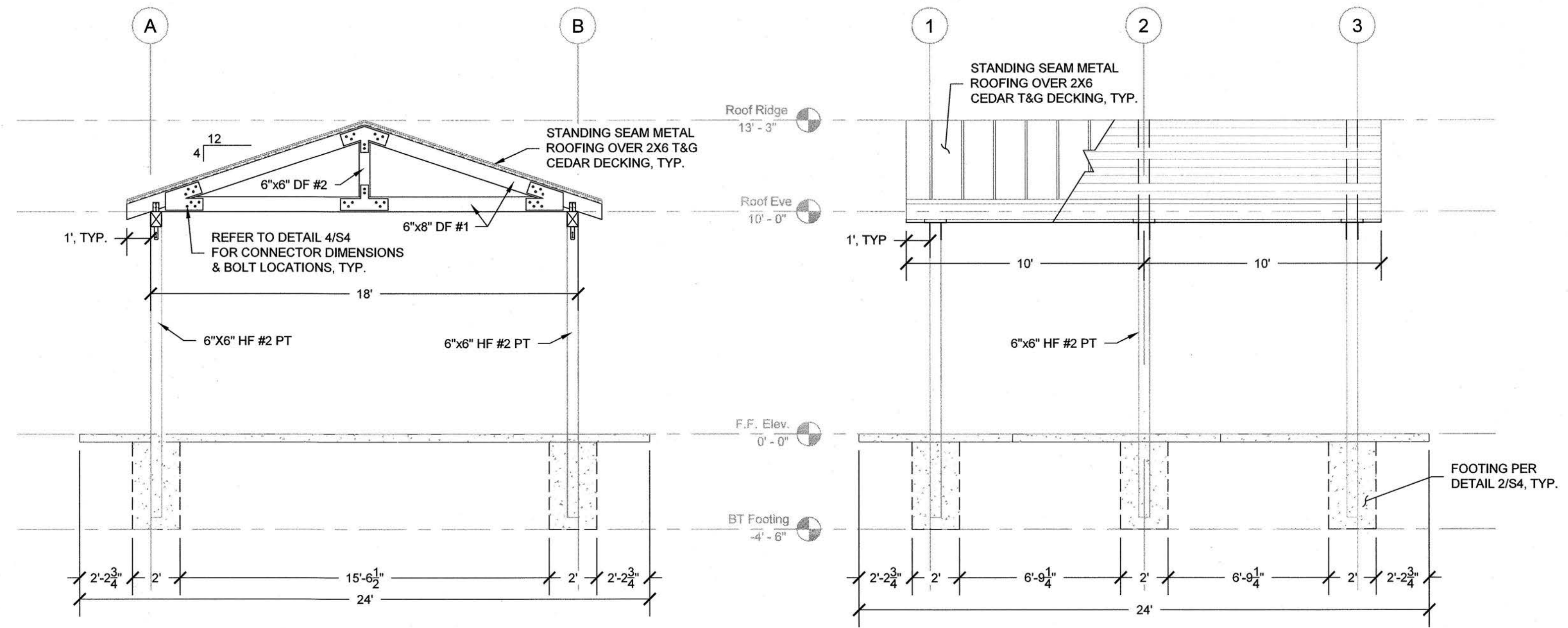
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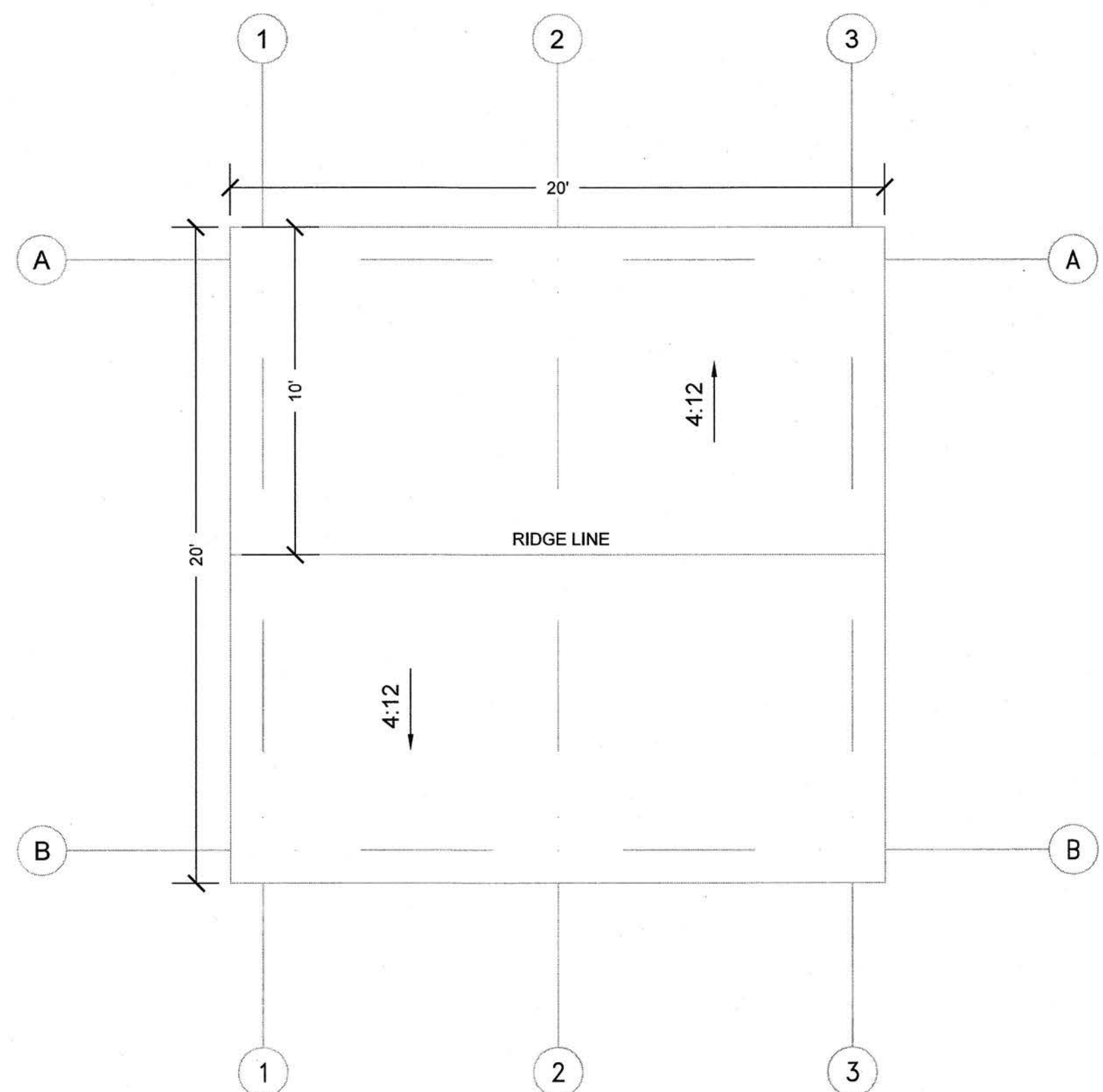
DATE:	03-24-22
PROJECT:	3948-02
FILE:	DETAILS
DESIGNED BY:	GTC
DRAWN BY:	GTC
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SCALE:	AS SHOWN
SHEET:	5 OF 10

C5



1 WEST/EAST ELEVATION VIEW
Scale: 1/4" = 1' - 0"

2 NORTH/SOUTH ELEVATION VIEW
Scale: 1/4" = 1' - 0"



3 ROOF PLAN
Scale: 1/4" = 1' - 0"

BUILDING CRITERIA:	
APPLICABLE CODES:	2019 OREGON STRUCTURAL SPECIALTY CODE
TYPE OF CONSTRUCTION:	V-B
SPRINKLERED:	NO
NUMBER OF STORIES:	1
FIRST FLOOR AREA:	400 SQ. FT.
SECOND FLOOR AREA:	N/A
BUILDING AREA:	400 SQ. FT.
BUILDING HEIGHT:	13'-3" ABOVE GRADE
ATTIC VENTILATION:	N/A - OPEN STRUCTURE
CRAWLSPACE VENTILATION:	N/A - SLAB ON GRADE FOUNDATION

BUILDING NOTES:	
1.	CONTRACTOR SHALL CONFIRM WITH CLIENT OR ENGINEER OF RECORD ALL FINISHES OR ARCHITECTURAL ELEMENTS PRIOR TO ORDERING MATERIALS.

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McDONALD PARK SHADE STRUCTURE FOR THE TOWN OF LAKEVIEW

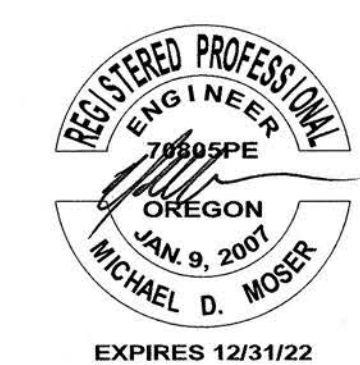
ARCHITECTURAL PLAN

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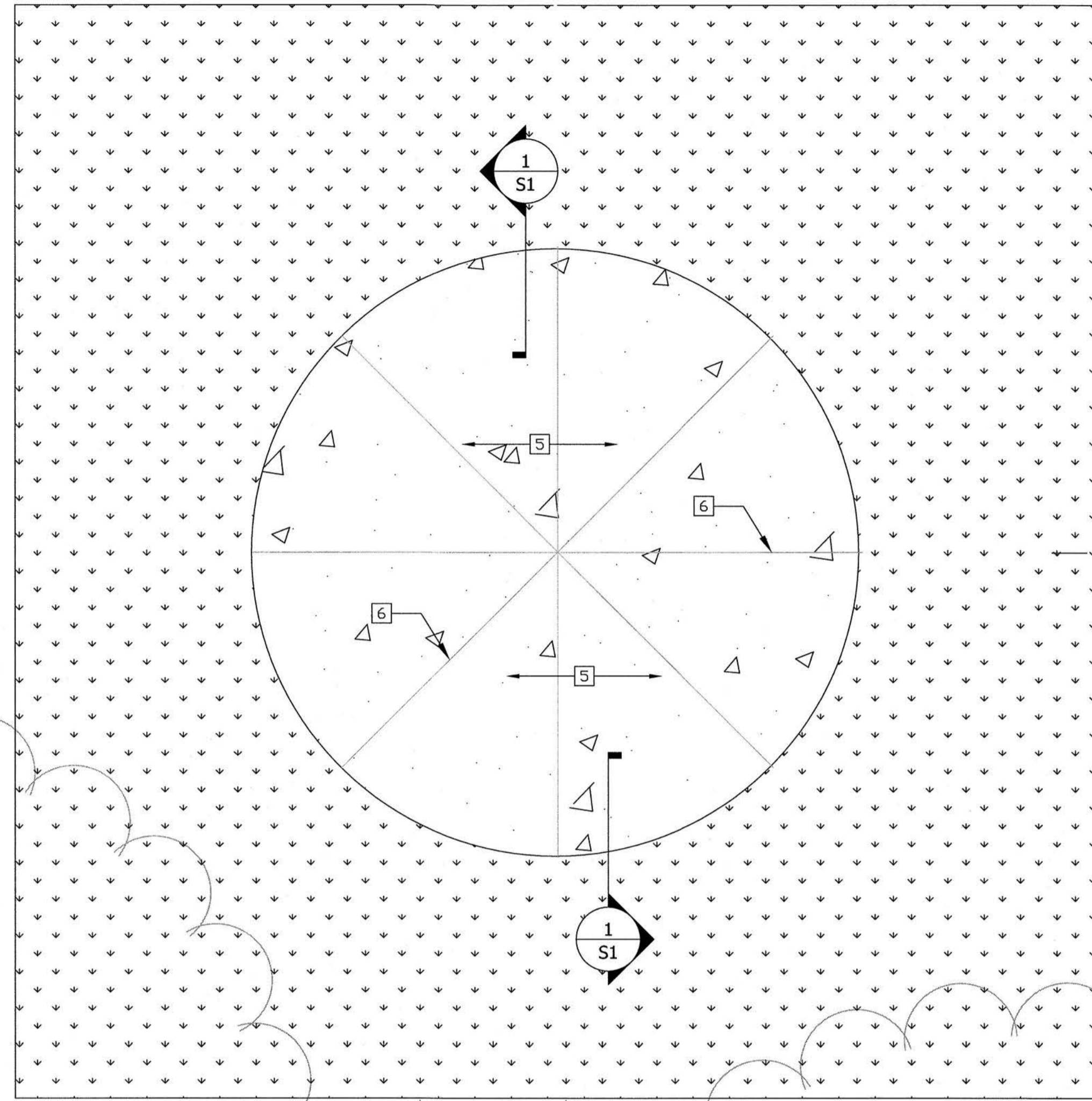
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FILE:	STRUC
DESIGNED BY:	TSL
DRAWN BY:	TSL
CHECKED BY:	MDM
SURVEYED BY:	N/A
SCALE:	AS SHOWN
SHEET:	6 OF 10



A1



1 SPLASH PAD PLAN VIEW
Scale: 1/4" = 1' = 0"

FOUNDATION NOTES:

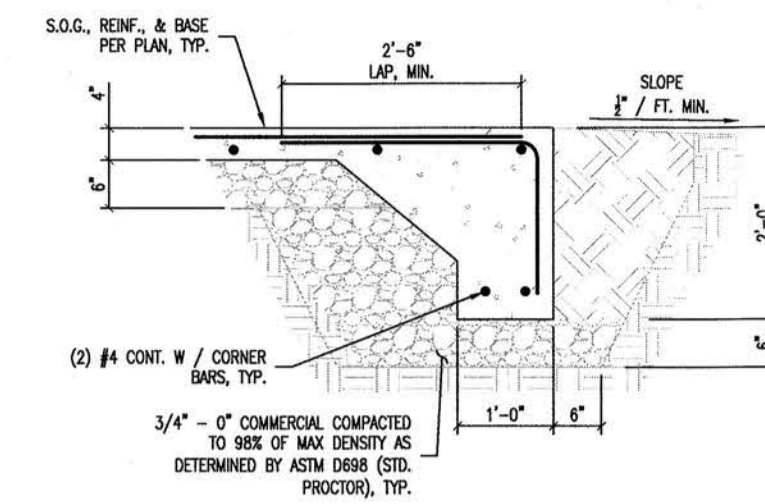
- REFER TO THIS SHEET FOR TYPICAL STRUCTURAL REQUIREMENTS.
- THE CONTRACTOR SHALL REFER TO CIVIL PLANS FOR ALL DIMENSIONS. DO NOT SCALE DRAWINGS.
- FINISH GRADE SHALL BE SLOPED AWAY FROM THE PAD AT 1/2" PER 1'-0" FOR 10'-0" MIN.
- ALL FOUNDATION SYSTEMS SHALL BEAR ON FIRM UNDISTURBED NATIVE SOIL OR COMPACTED STRUCTURAL FILL. MAXIMUM BEARING PRESSURE IS ASSUMED TO BE 1,500PSI UNLESS INDICATED OTHERWISE.
- 4" THICK CONCRETE SLAB ON GRADE WITH # 4 REBAR @ 12" O.C. EACH WAY AT SLAB MID THICKNESS OVER 6" 3/4" - 0" COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR.) PENETRATIONS THROUGH SLAB SHALL HAVE MIN. 3" CLEAR SPACE BETWEEN REBAR AND PENETRATION, TYP. SLAB IS TO BE BROOM FINISHED WITH STROKES RUNNING FROM PAD CENTER TO PERIMETER.
- CONTROL JOINT PER DETAIL 3, TYP.
- PENETRATIONS THROUGH SLAB SHALL BE PER DETAIL 2, TYP.

STRUCTURAL GENERAL NOTES - APPLICABLE TO ALL CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS

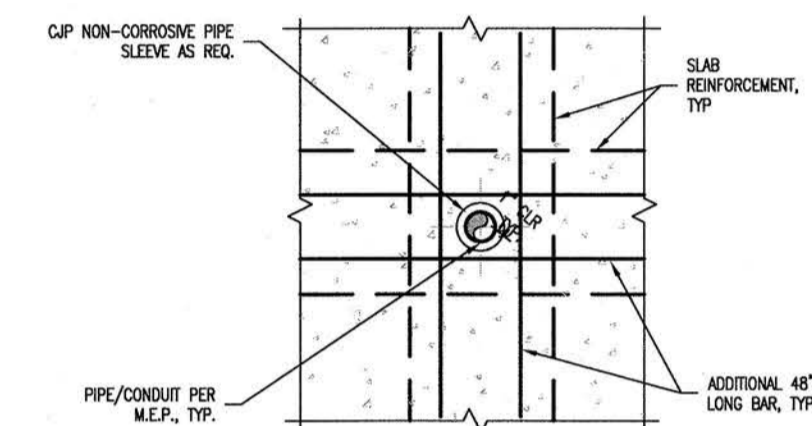
- A. DESIGN SCOPE**
- Structural Design shown on Sheet S1 by Adkins Engineering & Surveying, LLP, ACE, includes the following items.
 - Foundation Plan
 - Structural design shown on Sheet S1 may not include:
 - Mechanical, Electrical, or Plumbing items as it relates to the project. Refer to Civil/MEP plans for additional information.
 - Typical structural details provided for this project illustrate "nominal" conditions. They are not necessarily drawn to scale. The intent is to show important construction information such as member size, number and size of fasteners ect.. The contractor is solely responsible for verifying specific dimensions/angles and other conditions that may exist.
- B. GENERAL REQUIREMENTS**
- All work shall conform to the requirements of the 2019 Oregon Structural Specialty Code and any applicable local ordinances except where other notes are more restrictive.
 - Drawings are not to be scaled. Written dimensions shall govern construction. The contractor shall verify dimensions with the architectural drawings and the site conditions prior to construction and any discrepancies shall be brought to the attention of the architect and the engineer so that clarification can be made. All dimensions related to existing conditions shall be verified by the contractor.
 - The contractor shall notify the engineer in writing of any discrepancies on the drawings requiring clarification or revisions before commencing with work.
 - At all times the contractor shall be solely responsible for conditions at the jobsite. Neither the owner nor Architect/Engineer will enforce safety measure/regulations. The contractor shall design, construct, and maintain all safety devices and programs. Including safety of persons and property, design, adequacy, and safety of temporary shoring, bracing, formwork, scaffolding, erection sequence and methods etc.
 - The engineer's structural observation and site visits are not intended to include review of the above items.
 - The contractor shall furnish all labor, materials, and equipment necessary to complete the work shown or inferred by these drawings.
 - Where construction details are not shown or noted for any part of the work, such details shall be the same as for similar work shown on the drawings.
 - In case of conflict, notes and details on the drawings take precedence over the general notes and typical details.
 - The contractor shall provide manufacturer's product evaluation reports (ICC - ES Reports) and a list of all proposed substitutions to the Engineer for review and written approval before fabrication. Such review shall be on a time and materials basis with no guarantee approval will be granted.
 - Pipes, ducts, sleeves, chases, etc. shall not be placed in slabs, beams, or walls unless specifically shown or noted nor shall any structural member be cut for pipe, ducts, etc., unless specifically shown. Obtain written approval prior to installation of any additional holes, ducts, etc.
 - Locate and protect underground or concealed conduit, plumbing or other utilities where new work is being performed.
 - All existing construction is shown schematic only. The contractor is responsible to verify actual conditions and allow for them in his bid.
 - All communication shall be in writing. No verbal communications, decisions, instructions or approvals shall be valid.
- C. FOUNDATION (Spread Footings)**
- Adkins Engineering & Surveying recommends that the owner/contractor hire a Geotechnical Engineer licensed by the state of Oregon to evaluate the site and prepare a report of their findings. Due to the lack of such a report for this site, the foundation has been designed using a 1,500 psf. presumptive allowable bearing capacity per OSSC table 1804.2. The contractor shall report in writing to the engineer, any condition mitigating the above assumption.
 - Footings shall be founded a minimum of 12" below undisturbed ground surface. The footings shall also extend below the frost line as determined by the local Building Official. Frost depth for Lake County is 24" below finished grade.
 - If the stated bearing capacity, as determined by the Building Official or a Geotechnical Engineer, is not encountered, the contractor shall notify the Engineer of Record (EOR), in writing.
 - Footings and concrete slabs on grade shall bear on undisturbed native soil or approved structural fill compacted to a minimum of 95% under slab and 98% under footings of the maximum dry density as determined by ASTM test method D-698 (Standard Proctor).
 - Soft soil shall be removed and replaced with approved structural fill and compacted per note 4 above or the contractor may provide lean concrete.
 - Wherever practical native soil and or compacted structural fill shall be proof rolled with a fully loaded dump or water truck (loaded to 20 tons). If excessive rutting or pumping occurs the proof-roll has failed.
 - All excavation, soil removal, proof rolling and/or compaction shall be observed and tested by a geotechnical engineer. Observation and compaction reports shall be sent to the Architect, Engineer, and the Building Official.
 - Excavation shall be properly backfilled. Back fill for walls shall be pervious material acceptable to the Geotechnical Engineer. Do not place back fill behind walls before they have attained their design strength. Shore and protect walls from lateral loads until the supporting members are in place and have developed specified strength.
 - Use light weight equipment to compact the soil within 2 feet around foundation/basement walls.
 - Footings shall be stepped as required to maintain 12" below undisturbed native soil and also below frost depth noted above.
 - Roof and area drainage shall be directed away from the foundation.
 - Finish grade shall slope away from the foundation at a rate of 1/2 inch per foot for a minimum of 10 feet unless an engineer approved alternate drainage system is provided.
- D. CONCRETE**
- All concrete work shall conform to Chapter 19 of the 2019 Oregon Structural Specialty Code.
 - MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE f'_c (OSSC Table 1904.2.2)

TYPE OR LOCATION OF CONCRETE	MINIMUM SPECIFIED COMPRESSIVE STRENGTH (f'_c @ 28 days, psi)
Basement walls and foundations not exposed to weather	2,500 (a)
Basement slabs and interior slabs on grade, except garage floor slabs	2,500 (a)
Basement walls, foundation walls, exterior walls, and other vertical concrete surfaces exposed to weather	3,000 (b)
Driveways, curbs, walks, patios, porches, carport slabs, steps and other flatwork exposed to the weather, and garage floor slabs	3,500 (b)(c)

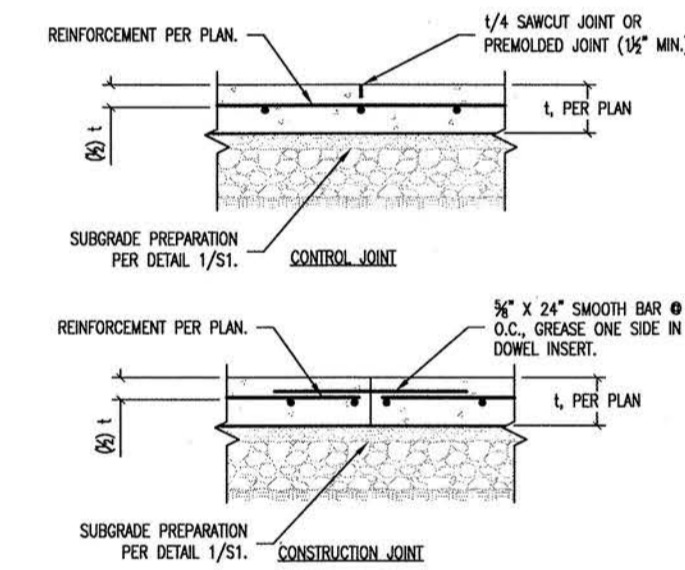
- Concrete in these locations that can be subjected to freezing and thawing during construction shall contain the proper admixtures to obtain 7% air entrainment.
 - Concrete in these locations shall contain the proper admixtures to obtain 7% air entrainment.
 - For garage floor slabs where a steel trowel finish is used the total air content required by section 1904.2.1 is permitted to be reduced to not less than 3 percent, provided the minimum specified compressive strength of the concrete is increased to 4,000 psi.
 - 28 day Concrete compressive strength shall be verified by standard 28 day cylinder tests per ASTM C39.
- 3. Reinforcing Steel:**
- Shall conform to ASTM A615, Grade 60, for deformed bars unless noted otherwise.
 - Splices shall be 48 bar diameters with 24" minimum unless noted otherwise.
 - Where horizontal reinforcing is noted as "continuous" provide 2'-6" X 2'-6" corner bars at corners of bond beams, footings, walls, ect. Corner bars shall be of the same size, spacing, location, and quantity as the continuing reinforcing specified.
- When air temperature is above 85 degrees Fahrenheit or when wind exceeds 10 mph. place concrete in accordance with ACI 305, Hot Weather Concreting. When the average air temperature is below 40 degree Fahrenheit place concrete in accordance with ACI 306, cold weather concreting.
 - Per the aquatic playground manufacturer, all structural concrete must be a minimum of 3,000psi.



1 SPLASH PAD PERIMETER
Scale: 3/4" = 1'-0"



2 PENETRATIONS THROUGH SLAB ON GRADE
Scale: 3/4" = 1'-0"



- NOTES:**
- CONSTRUCTION OR CONTROL JOINT LOCATIONS PER FOUNDATION/SLAB PLAN.
 - USE 'EARLY ENTRY DRY CUT SAW' AS SOON AS POSSIBLE WITHOUT CAUSING RAVELING OF CONCRETE EXPOSED SAW CUT SHORT DIRECTION FIRST.
 - PROVIDE CONSTRUCTION/CONTROL JOINT TO ENCLOSE APPROXIMATE SQ. AREAS OF NO MORE THAN 100 SF, MAX PANEL ASPECT RATIO OF 1.3 TO 1.0.

3 SLAB ON GRADE JOINT DETAILS
Scale: 3/4" = 1'-0"

**McDONALD PARK SPLASH PAD
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TOWN OF LAKEVIEW
STRUCTURAL PLAN**

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DATE: 03-24-22
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FILE: STRUC
DESIGNED BY: TSL
DRAWN BY: TSL
CHECKED BY: MDM
SURVEYED BY: N/A
SCALE: AS SHOWN
SHEET: 7 OF 10



S1

STRUCTURAL GENERAL NOTES - APPLICABLE TO ALL CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS

A. DESIGN SCOPE

- Structural Design shown on drawings S1 through S4 by Adkins Engineering & Surveying, LLP, ACE, includes the following items.
 - Foundation & Framing.
- Structural design shown on drawings S1 through S4 does not include:
 - Architectural items such as but not limited to; windows, doors, moisture barriers, water proofing, mechanical units, plumbing, or electrical items.
- Typical structural details provided for this project illustrate "nominal" conditions. They are not necessarily drawn to scale. The intent is to show important construction information such as member size, number and size of fasteners etc.. The contractor is solely responsible for verifying specific dimensions/angles and other conditions that may exist.

B. GENERAL REQUIREMENTS

- All work shall conform to the requirements of the 2019 Oregon Structural Specialty Code and any applicable local ordinances except where other notes are more restrictive.
- Drawings are not to be scaled. Written dimensions shall govern construction. The contractor shall verify dimensions with the architectural drawings and the site conditions prior to construction and any discrepancies shall be brought to the attention of the architect and the engineer so that clarification can be made. All dimensions related to existing conditions shall be verified by the contractor.
- The contractor shall notify the engineer in writing of any discrepancies on the drawings requiring clarification or revisions before commencing with work.
- At all times the contractor shall be solely responsible for conditions at the jobsite. Neither the owner nor Architect/Engineer will enforce safety measure/regulations. The contractor shall design, construct, and maintain all safety devices and programs. Including safety of persons and property, design, adequacy, and safety of temporary shoring, bracing, formwork, scaffolding, erection sequence and methods etc.
- The engineer's structural observation and site visits are not intended to include review of the above items.
- The contractor shall furnish all labor, materials, and equipment necessary to complete the work shown or inferred by these drawings.
- Where construction details are not shown or noted for any part of the work, such details shall be the same as for similar work shown on the drawings.
- In case of conflict, notes and details on the drawings take precedence over the general notes and typical details.
- The contractor shall provide manufacturer's product evaluation reports (ICC - ES Reports) and a list of all proposed substitutions to the Engineer for review and written approval before fabrication. Such review shall be on a time and materials basis with no guarantee approval will be granted.
- Pipes, ducts, sleeves, chases, etc. shall not be placed in slabs, beams, or walls unless specifically shown or noted nor shall any structural member be cut for pipe, ducts, etc., unless specifically shown. Obtain written approval prior to installation of any additional holes, ducts, etc.
- Locate and protect underground or concealed conduit, plumbing or other utilities where new work is being performed.
- All existing construction is shown schematic only. The contractor is responsible to verify actual conditions and allow for them in his bid.
- All communication shall be in writing. No verbal communications, decisions, instructions or approvals shall be valid.

C. SUBMITTALS

- Shop drawings
 - Shop drawings shall be submitted to the architect/engineer for review prior to fabrication and construction.
 - Prior to submittal the general contractor shall review all submittals for conformance with the construction documents and shall stamp submittals as being "Reviewed for Conformance".
 - Any detail on the shop drawing that deviates from the construction documents shall be clouded.
 - Shop drawings shall be submitted to the Architect/Engineer regarding all structural items including:
 - Timber Trusses

D. DESIGN CODE & CRITERIA

- All design, material, and construction for this project shall conform to the 2019 Oregon Structural Specialty Code (OSSC) based on the 2018 International Building Code (IBC).
- The 2018 International Building Code design criteria:

a. Floor Live Load = n/a	o. Components and Cladding studs = n/a
b. Floor Dead Load = n/a	p. Seismic Importance Factor, $I_e = 1.0$
c. Roof Live Load = 20 psf	q. $S_s = 0.498$
d. Roof dead load 15 psf	r. $S_1 = 0.20$
e. Truss bottom chord dead load = n/a	s. Site Class = D
f. Ground Snow Load, $P_g = 52$ psf	t. $S_{os} = 0.466$
g. Flat Roof snow load, $P_f = 32$ psf	u. $S_{o1} = n/a$
h. Snow Exposure Factor, $C_e = 0.9$	v. Seismic Design Category = D
i. Snow Load Importance Factor, $I = 0.8$	w. Basic Seismic Force Resisting System = Cantilevered Column System
j. Thermal Factor, $C_t = 1.2$	x. Response Modification Factor, $R = 1.5$
k. Ultimate Wind Speed = 99 mph	y. Lateral Analysis Procedure = Equivalent Lateral Force Procedure
l. Wind Importance Factor, $I_w = 1.00$	
m. Wind Exposure = C	
n. Internal Pressure Coefficient = 0.18	

E. FOUNDATION (Spread Footings)

- Adkins Engineering & Surveying recommends that the owner/contractor hire a Geotechnical Engineer licensed by the state of Oregon to evaluate the site and prepare a report of their findings. Due to the lack of such a report for this site, the foundation has been designed using a 1,500 psf. presumptive allowable bearing capacity per OSSC table 1804.2. The contractor shall report in writing to the engineer, any condition mitigating the above assumption.
- Footings shall be founded a minimum of 12" below undisturbed ground surface. The footings shall also extend below the frost line as determined by the local Building Official. Frost depth for Lake County is 24" below finished grade.
- If the stated bearing capacity, as determined by the Building Official or a Geotechnical Engineer, is not encountered, the contractor shall notify the Engineer of Record (EOR), in writing.
- Footings and concrete slabs on grade shall bear on undisturbed native soil or approved structural fill compacted to a minimum of 95% under slab and 98% under footings of the maximum dry density as determined by ASTM test method D-698 (Standard Proctor).
- Soft soil shall be removed and replaced with approved structural fill and compacted per note 4 above or the contractor may provide lean concrete.
- Wherever practical native soil and or compacted structural fill shall be proof rolled with a fully loaded dump or water truck (loaded to 20 tons). If excessive rutting or pumping occurs the proof-roll has failed.
- All excavation, soil removal, proof rolling and/or compaction shall be observed and tested by a geotechnical engineer. Observation and compaction reports shall be sent to the Architect, Engineer, and the Building Official.
- Excavation shall be properly backfilled. Back fill for walls shall be pervious material acceptable to the Geotechnical Engineer. Do not place back fill behind walls before they have attained their design strength. Shore and protect walls from lateral loads until the supporting members are in place and have developed specified strength.
- Use light weight equipment to compact the soil within 2 feet around foundation/basement walls.
- Footings shall be stepped as required to maintain 12" below undisturbed native soil and also below frost depth noted above.
- Roof and area drainage shall be directed away from the foundation.
- Finish grade shall slope away from the foundation at a rate of 1/2 inch per foot for a minimum of 10 feet unless an engineer approved alternate drainage system is provided.
- Reference the project manual (technical specifications) for additional requirements.

F. CONCRETE

- All concrete work shall conform to chapter 19 of the 2019 Oregon Structural Specialty Code.
- MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE f'_c (OSSC Table 1904.2.2)

TYPE OR LOCATION OF CONCRETE	MINIMUM SPECIFIED COMPRESSIVE STRENGTH (f'_c @ 28 days, psi)
Basement walls and foundations not exposed to weather	2,500 (a)
Basement slabs and interior slabs on grade, except garage floor slabs	2,500 (a)
Basement walls, foundation walls, exterior walls, and other vertical concrete surfaces exposed to weather	3,000 (b)
Driveways, curbs, walks, patios, porches, carport slabs, steps and other flatwork exposed to the weather, and garage floor slabs	3,500 (b)(c)

- Concrete in these locations that can be subjected to freezing and thawing during construction shall contain the proper admixtures to obtain 7% air entrainment.
 - Concrete in these locations shall contain the proper admixtures to obtain 7% air entrainment.
 - For garage floor slabs where a steel trowel finish is used the total air content required by section 1904.2.1 is permitted to be reduced to not less than 3 percent, provided the minimum specified compressive strength of the concrete is increased to 4,000 psi.
 - 28 day Concrete compressive strength shall be verified by standard 28 day cylinder tests per ASTM C39.
- Reinforcing Steel:
 - Shall conform to ASTM A615, Grade 60, for deformed bars unless noted otherwise.
 - Splices shall be 48 bar diameters with 24" minimum unless noted otherwise.
 - Where horizontal reinforcing is noted as "continuous" provide 2'-6" X 2'-6" corner bars at corners of bond beams, footings, walls, ect. Corner bars shall be of the same size, spacing, location, and quantity as the continuous reinforcing specified.
 - When air temperature is above 85 degrees Fahrenheit or when wind exceeds 10 mph, place concrete in accordance with ACI 305, Hot Weather Concreting. When the average air temperature is below 40 degree Fahrenheit place concrete in accordance with ACI 306, cold weather concreting.

G. WOOD GENERAL:

- All wood exposed to the weather or in contact with concrete or masonry shall be pressure treated in accordance with the applicable AWPA Standard U1 and M4 for the species, product, preservative, and end use or protected with a waterproof membrane. Preservatives shall be listed in section 4 of AWPA U1. Newly exposed surfaces resulting from field cutting, boring or handling shall be field treated in accordance with AWPA M-4. All fasteners and framing connectors in contact with treated wood shall be corrosion resistant per the recommendation of the treated wood supplier / manufacturer for the type of wood, preservative, and service condition. For extreme service conditions or in the absence of guidance from the treated wood supplier / manufacturer, the use of stainless steel connectors and fasteners are recommended.
- Maintain 1/2 inch air space at sides and at ends for beam pockets in concrete or masonry. Minimum bearing is 3 inches U.N.O.
- Wood framing members, sheathing, and combustible materials shall not be placed closer than 2 inches to chimney walls. This gap shall be fire stopped using a minimum of 1 inch thick noncombustible materials, U.N.O.
- All framing connections shall be per plan and detail. Where connections have not been specifically detailed the contractor shall follow details provided for similar construction. In the absence of the above mentioned details the contractor shall provide appropriate Simpson Strong-Tie connection hardware at the following locations; truss to wall, truss to truss (per truss manufacturer), truss to beam, joist/rafter to beam, joist/rafter to ledger, joist/rafter to wall top plate, beam to girder, beam/girder to post, post to post, post to footing, drag truss to shearwall, and shearwall boundary member anchors (holdowns). Connections employing toe nails without any other means of restraint are not permitted U.N.O. The contractor shall maintain a copy of the current Simpson Strong-Tie catalog and installation manual on site at all times and follow all manufacturer's instruction to achieve maximum capacity of each connector U.N.O.
- Reference the project manual (technical specifications) for additional requirements.

MATERIALS

SAWN LUMBER:

- All dimensioned lumber and timbers shall be Douglas Fir/Larch #2 (DF #2) or better unless noted otherwise on drawings. Classification in regard to strength and utility shall be in accordance with American Softwood Lumber Standard DOC PS 20 and standard grading rules for western lumber.
- All wood members shall be stamped showing wood grade and the grading agency.
- Moisture content shall not exceed 19% at time of placement. Green lumber should be shored at mid-span until dry to prevent sagging.

H. ABBREVIATIONS:

A.B.	Anchor Bolt	F.S.	Far Side	P.L.F.	Pound per Linear Foot
A.C.E.	Adkins Consulting Engineers	Ftg.	Footing	P.T.	Pressure Treated
A.I.T.	Alternate	Galv.	Galvanized	P.W.	Plate Washer
A.P.A.	American Plywood Association	G.C.	General Contractor	Ref.	Reference
Arch.	Architect/Architectural	G.I.R.	Geotechnical Investigation Report	Reinf.	Reinforcement (rebar)
B.	Bottom	G.L.B.	Glue Laminated Beam	Rft.	Rafter
Bkg.	Blocking	Hdr.	Header	S.G.N.	Structural General Notes
B.N.	Boundary Nailing	Hngr.	Hanger	Sim.	Similar
B.O.F.	Bottom of Footing	Horiz.	Horizontal	S.N.	Shear Nail
C.F.S.	Cold Formed Steel	H.D.G.	Hot Dip Galvanized	S.L.	Snow Load
		H.S.H.	Horizontally Slotted Holes	Spec.	Specifications
				Std.	Standard
				Stgr.	Stagger
				Stifnr.	Stiffener
C.B.C.	California Building Code (L.G.S.T.)	I.S.B.O.	International Conference of Building Officials	T.	Top
C.J.	Construction Joint	I.S.C.	International Code Council	T&B	Top and Bottom
C.L.	Center Line			T.D.	Typical Detail
Clr.	Clear	I.T.	Inside Diameter	T&G	Tongue and Groove
Conn.	Connection	Int.	Interior	Thk.	Thickness
Cont.	Continuous	Jnt.	Joint	T.N.	Toe Nail
Dbl.	Double	Ldgr.	Ledger	T.O.B.	Top Of Beam
Dim.	Dimension	L.G.S.T.	Light Gage Steel (C.F.S.)	T.O.C.	Top Of Concrete
D.L.	Dead Load	L.L.	Live Load	T.O.F.	Top Of Footing
D.O.	Ditto (repeat)	Matl.	Material	T.O.M.	Top Of Masonry
Dwg.	Drawing	Max.	Maximum	T.O.S.	Top Of Steel
Dwl.	Dowel	Mfr.	Manufacturer	T.O.P.	Top Of Plate
E	Existing	Min.	Minimum	Typ.	Typical
E.F.	Each Face	Mtl.	Metal	U.B.C.	Uniform Building Code
E.G.	Existing Grade	No.	Number	U.B.O.	Unless Noted Otherwise
EI.	Elevation	N.S.	Near Side	Vert.	Vertical
Embed	Embedment	N.T.S.	Not To Scale	V.S.H.	Vertically Slotted Holes
E.N.	Edge Nail	O.C.	On Center	Wd.	Wood
E.O.R.	Engineer of Record	O.D.	Outside Diameter	W.E.N.	Wall Edge Nailing
Eq.	Equal	O.H.	Opposite Hand	W/W.F.	Welded Wire Fabric
E.S.	Each Side	O.R.C.	Oregon Residential Specialty Code	W/W.	With
E.W.	Each Way	O.S.B.	Oriented Strand Board	W/O	WithOut
F.D.	Frost Depth	O.S.S.C.	Oregon Structural Specialty Code		
F.E.N.	Floor Edge Nailing	O.S.V.	On Site Verification		
F.F.	Finished Floor	P.D.T.F.	Power Driven Track Fastener		
F.G.	Finished Grade	Perp.	Perpendicular		
F.N.	Field (intermediate) Nailing	Pl.	Plate		
F.O.C.	Face Of Concrete				
F.O.M.	Face Of Masonry				
F.O.S.	Face of Stud				

No.	REVISION	DATE	BY

McDONALD PARK SHADE STRUCTURE FOR THE TOWN OF LAKEVIEW

STRUCTURAL GENERAL NOTES

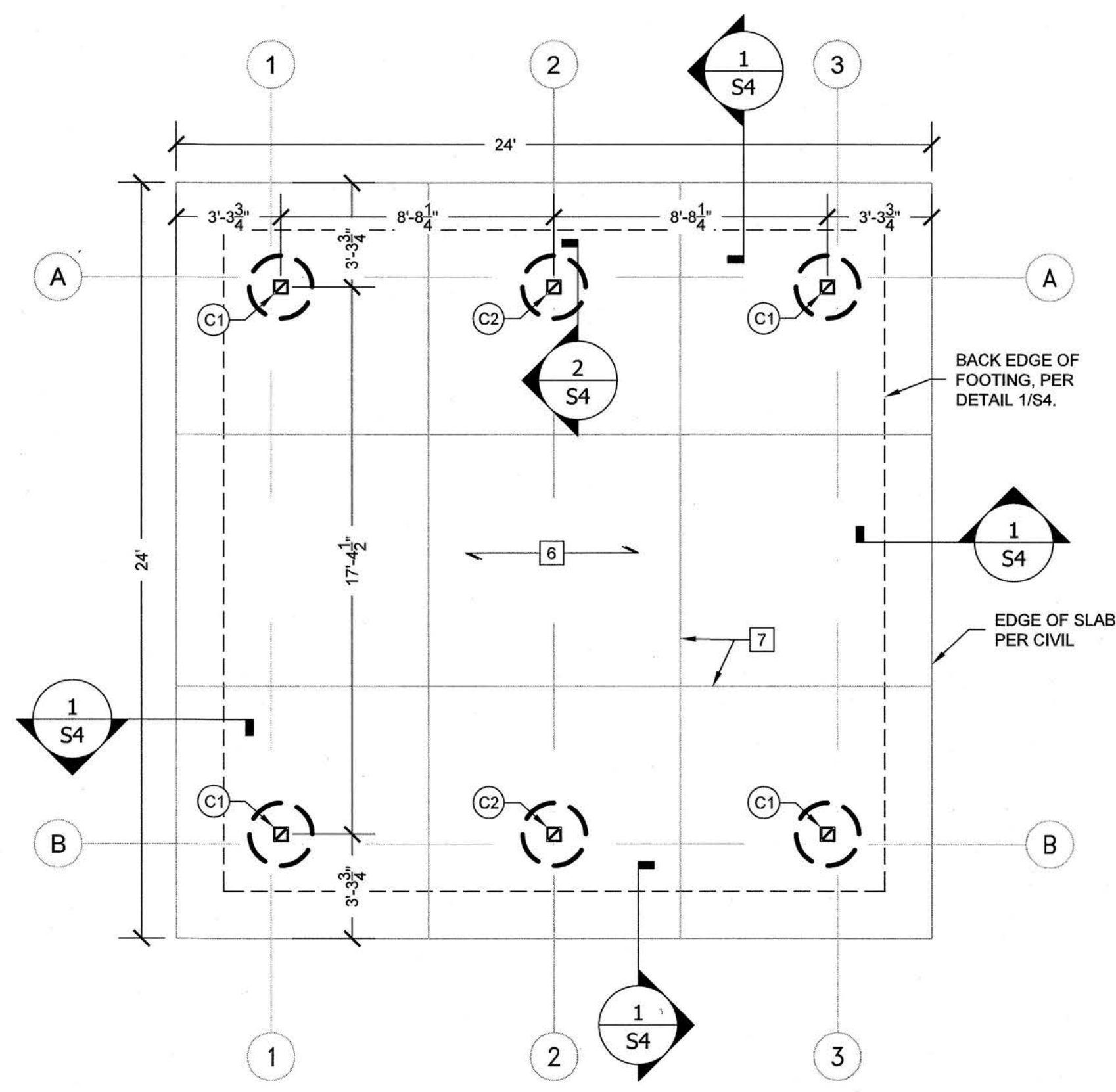
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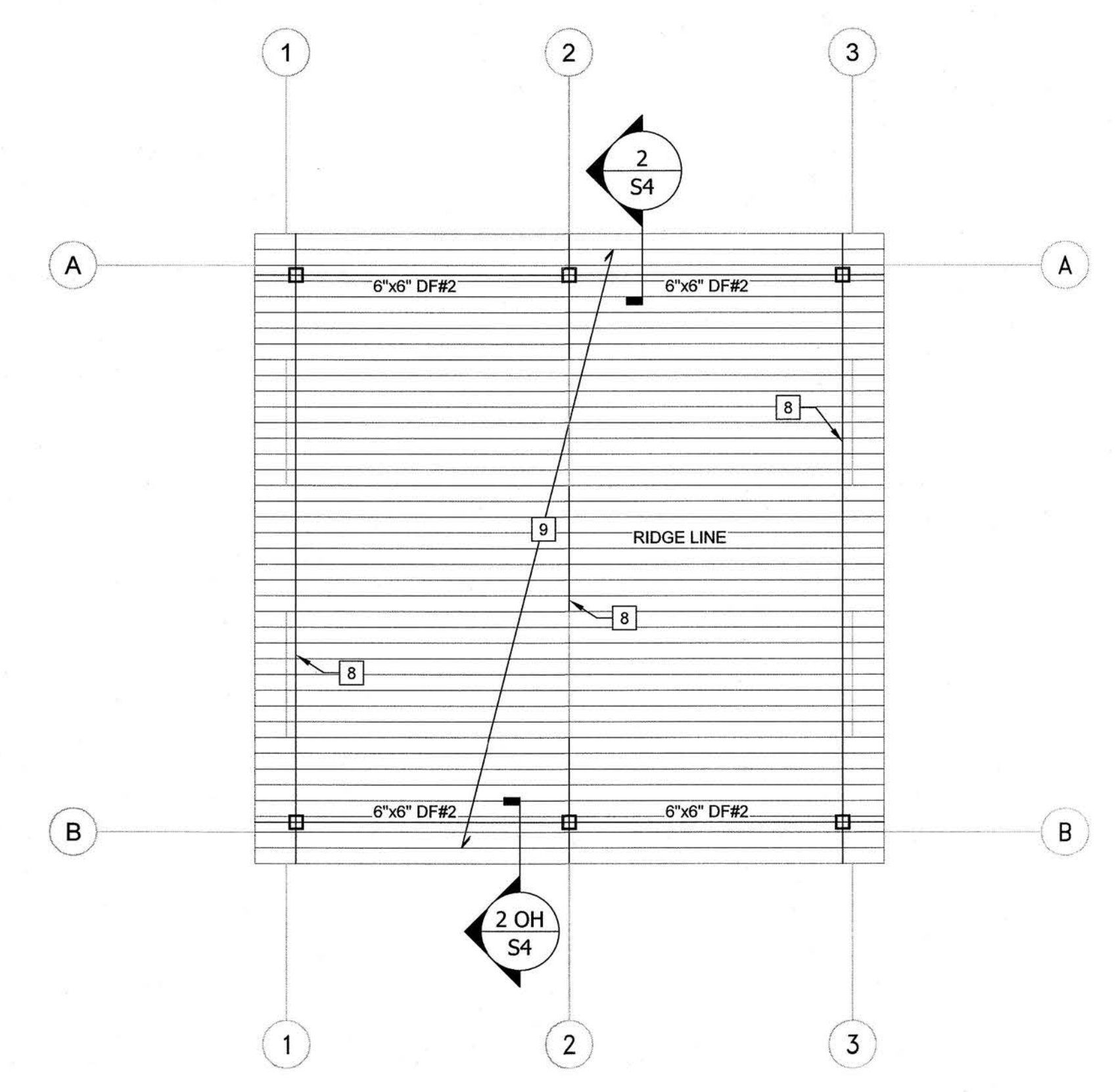
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PROJECT:	3948-02
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DESIGNED BY:	TSL
DRAWN BY:	TSL
CHECKED BY:	MDM
SURVEYED BY:	N/A
SCALE:	AS SHOWN
SHEET:	8 OF 10



S2



1 FOUNDATION PLAN
Scale: 1/4" = 1' - 0"



2 ROOF FRAMING PLAN
Scale: 1/4" = 1' - 0"

CONSTRUCTION NOTES:

1. REFER TO SHEET S2, STRUCTURAL GENERAL NOTES, FOR TYPICAL REQUIREMENTS.
2. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS. DO NOT SCALE DRAWINGS.
3. FINISH GRADE SHALL BE SLOPED AWAY FROM THE FOUNDATION AT 1/2" PER 1'-0" FOR 10'-0" MIN.
4. CENTER FOOTING UNDER WALLS AND POSTS UNLESS NOTED OTHERWISE ON PLANS AND/OR DETAILS.
5. ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED NATIVE SOIL OR COMPACTED STRUCTURAL FILL. MAXIMUM BEARING PRESSURE IS ASSUMED TO BE 1,500PSI UNLESS PROJECT GEOTECH REPORT INDICATES OTHERWISE.
6. 4" THICK CONCRETE SLAB ON GRADE WITH # 4 REBAR @ 18" O.C. EACH WAY AT SLAB MID THICKNESS OVER 6" 3/4" - 0" COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR). PENETRATIONS THROUGH SLAB SHALL HAVE MIN. 3" CLEAR SPACE BETWEEN REBAR AND PENETRATION, TYP.
7. CONTROL JOINT PER DETAIL 3/S4, TYP.
8. HEAVY TIMBER TRUSSES - REFER TO ELEVATION VIEWS AND DETAIL 2/SHEET S4 FOR ADDITIONAL INFORMATION.
9. INSTALL 2"x6" CEDAR DECKING OVER HEAVY TIMBER TRUSSES. REFER TO DETAIL 2/SHEET S4 FOR ADDITIONAL INFORMATION.

SHEET LEGEND:

□	WOOD POST BELOW
—	BEAM/GIRDER/TRUSS/HEADER PER PLAN.
—	PURLIN/TRUSS CONNECTION W/SIMPSON HANGER PER PLAN.

WOOD COLUMN SCHEDULE

MARK	TYPE	SIZE	CONNECTION		NOTES
			BASE	CAP	
C1	HF #2 PT	6" X 6"	EMBEDDED	CC66	
C2	HF #2 PT	6" X 6"	EMBEDDED	ECCU66	

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McDONALD PARK SHADE STRUCTURE FOR THE TOWN OF LAKEVIEW

FOUNDATION & ROOF PLANS

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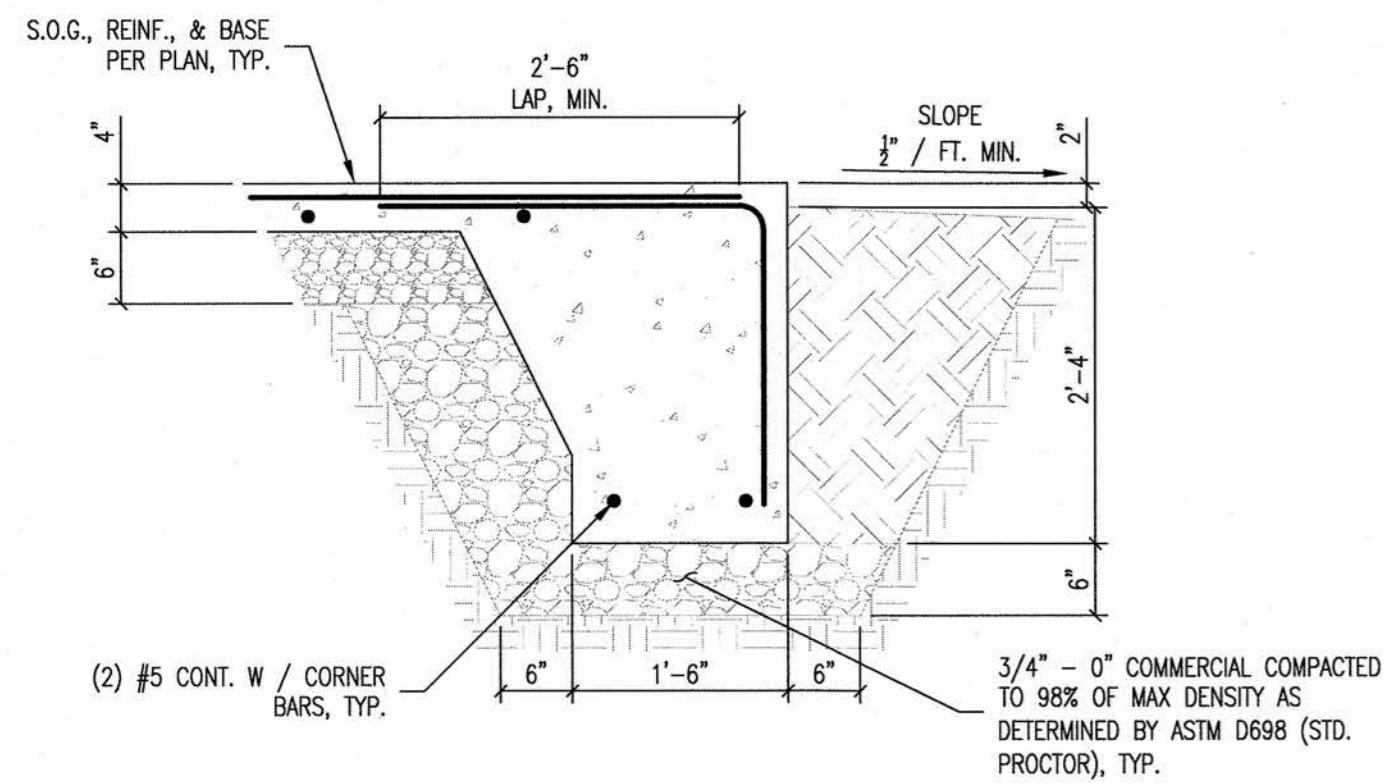
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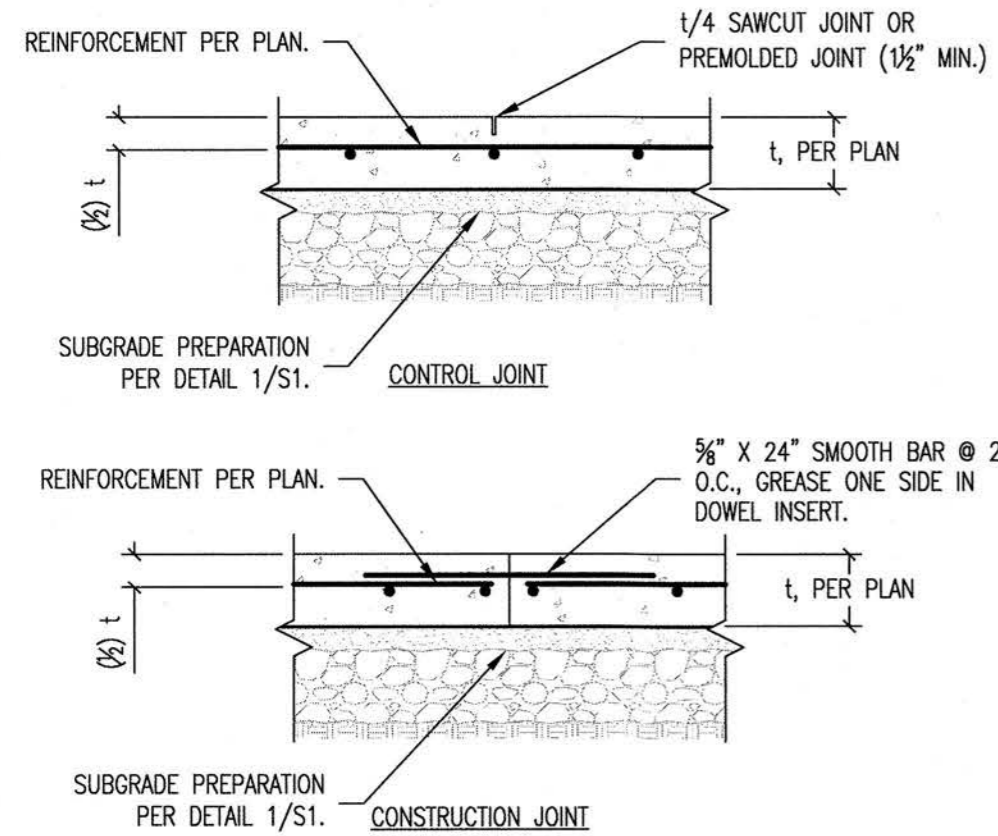
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PROJECT: 3948-02
FILE: STRUC
DESIGNED BY: TSL
DRAWN BY: TSL
CHECKED BY: MDM
SURVEYED BY: N/A
SCALE: AS SHOWN
SHEET: 9 OF 10



S3

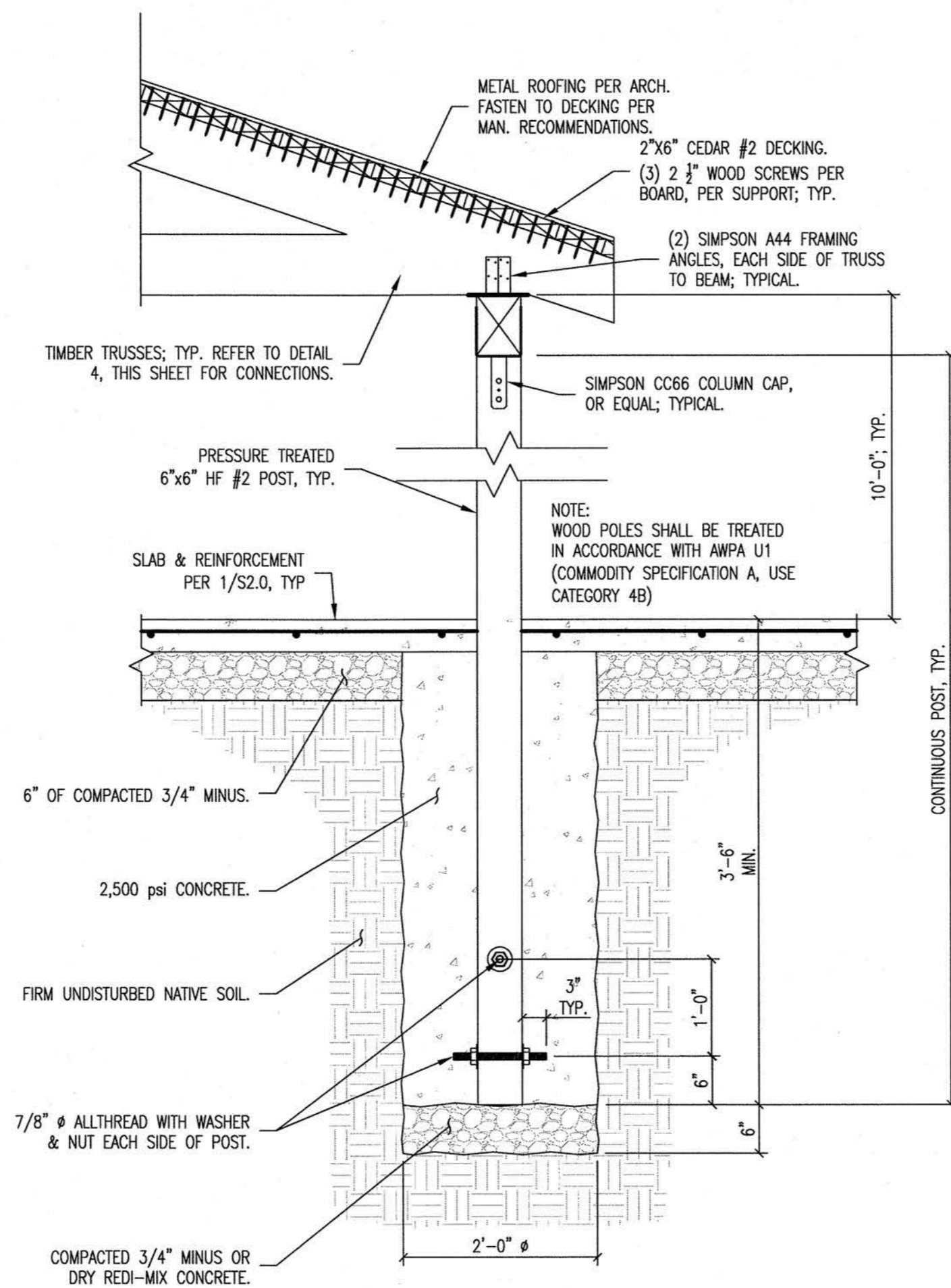


1 FOOTING DETAIL
Scale: 3/4" = 1'-0"

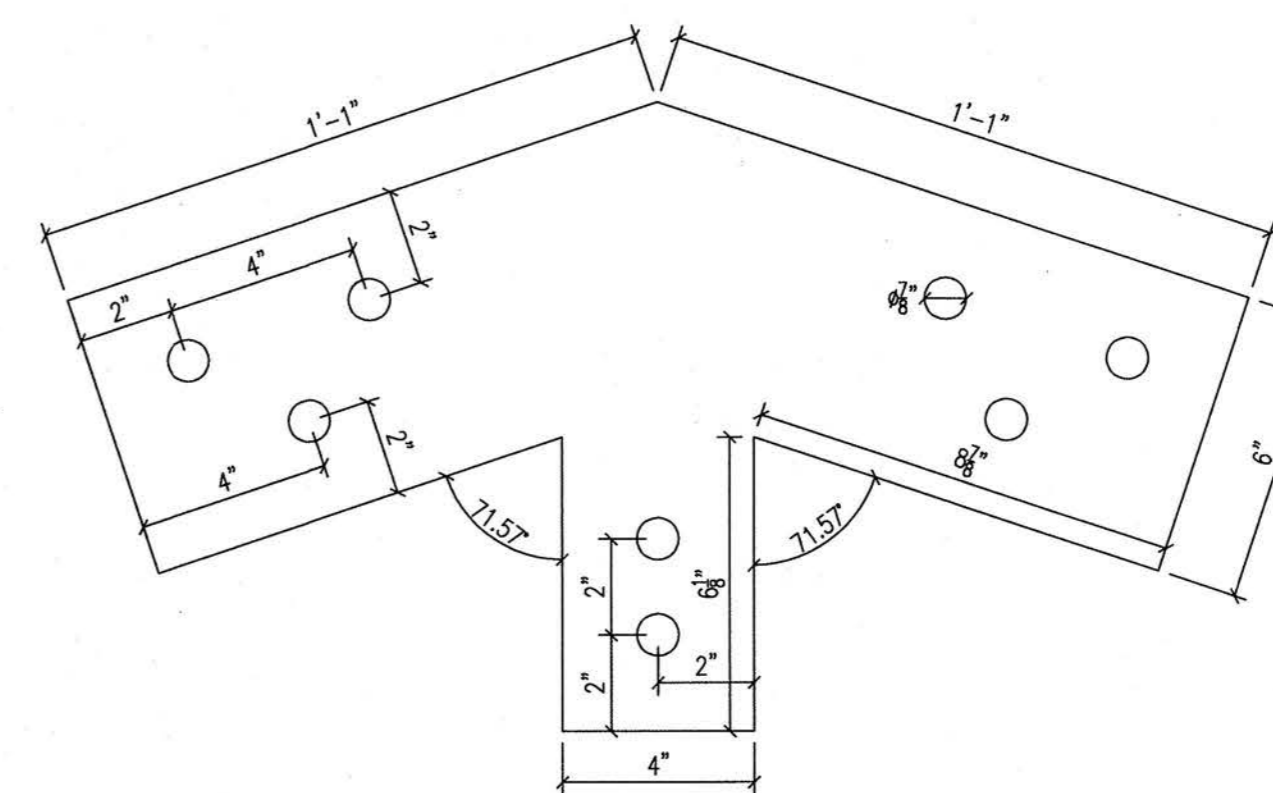
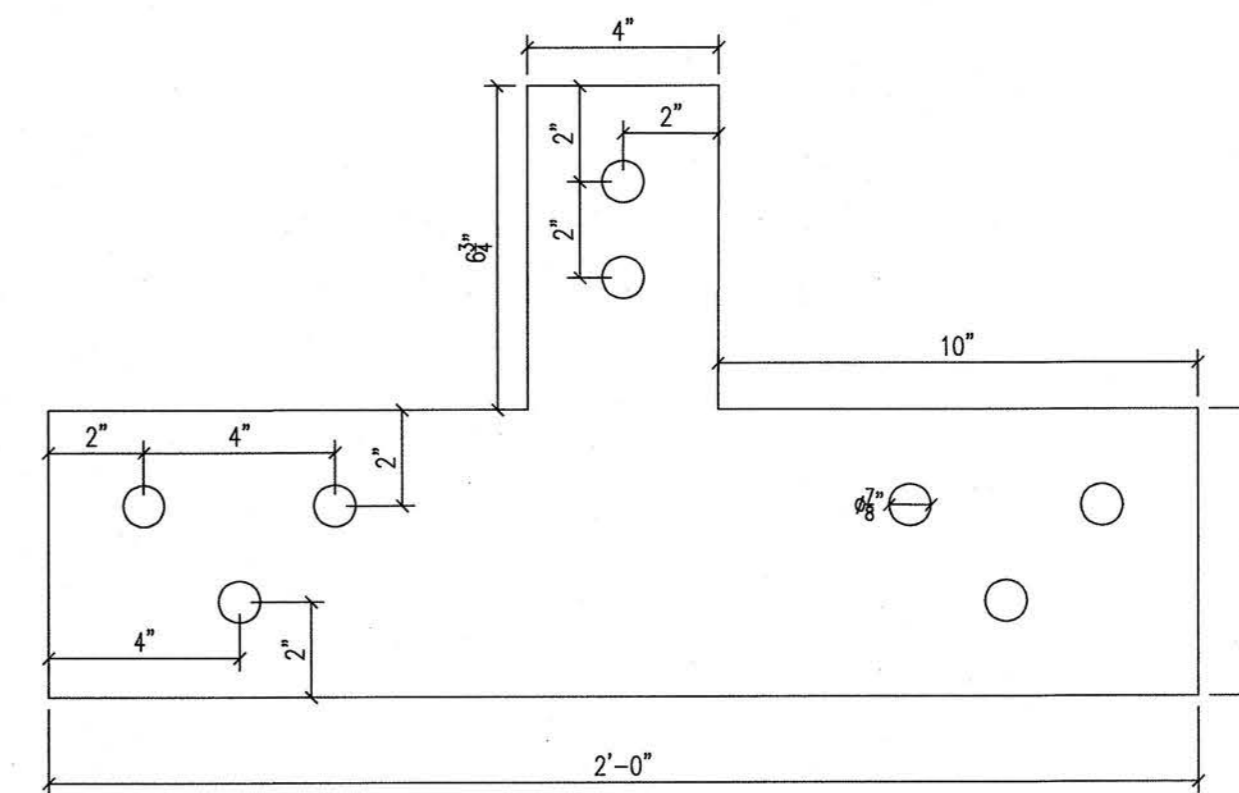
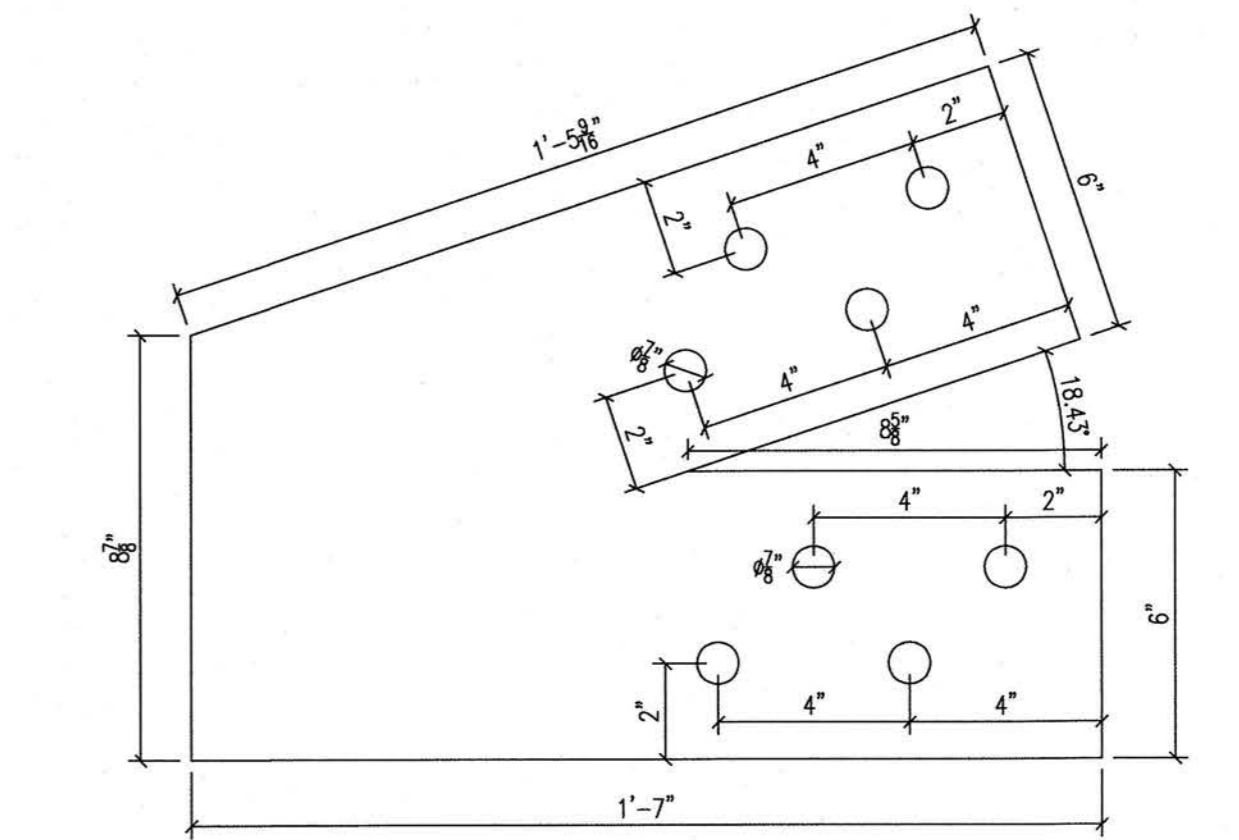


NOTES:
1. CONSTRUCTION OR CONTROL JOINT LOCATIONS PER FOUNDATION/SLAB PLAN.
2. USE "EARLY ENTRY DRY CUT SAW" AS SOON AS POSSIBLE WITHOUT CAUSING RAVELING OF CONCRETE EDGES. SAW CUT SHORT DIRECTION FIRST.
3. PROVIDE CONSTRUCTION/CONTROL JOINT TO ENCLOSE APPROXIMATE SQ. AREAS OF NO MORE THAN 100 SF, MAX PANEL ASPECT RATIO OF 1.3 TO 1.0.

3 SLAB ON GRADE JOINT DETAILS
Scale: 3/4" = 1'-0"



2 EMBEDDED POST DETAIL
3/4" = 1'-0"



4 BOLTED CONNECTIONS DETAIL
3" = 1'-0"

NOTE:
ALL CONNECTIONS WILL BE FABRICATED FROM 1/2" A36 STEEL, DIMENSIONS AND BORE LOCATIONS INDICATED ABOVE.
CONTRACTOR TO INSTALL 3/4" DIA. A36 STEEL BOLTS AT ALL INDICATED LOCATIONS.
TRUSS MEMBERS WILL BE ENCLOSED BETWEEN A STEEL PLATE CONNECTION ON EITHER END, TYPICAL.

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McDONALD PARK SHADE STRUCTURE FOR THE TOWN OF LAKEVIEW
STRUCTURAL DETAILS

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S4