



# CASE STUDY

*Porcupine, SD is located nearly 70 miles from any major city. It is on the Pine Ridge Reservation in the Badlands region of South Dakota. When the dialysis facility in nearby Porcupine, SD was closed due to structural issues, the Oglala Sioux were left lacking renal treatment options. Both the remote location and the accelerated time line pointed to modular construction as the optimal solution.*

## KEY ACHIEVEMENTS

*Modular Building resolves issue of scarce supply of skilled labor and materials in remote area*

*Groundbreaking ceremony held April 30th. Building open and treating patients September 15th*

*Provided a turnkey solution including design and construction*

*Energy efficient lighting systems*

*Significantly less waste compared to conventional building*

*Sustainable and efficient geothermal HVAC system with 12 drilled wells for the ground loop*

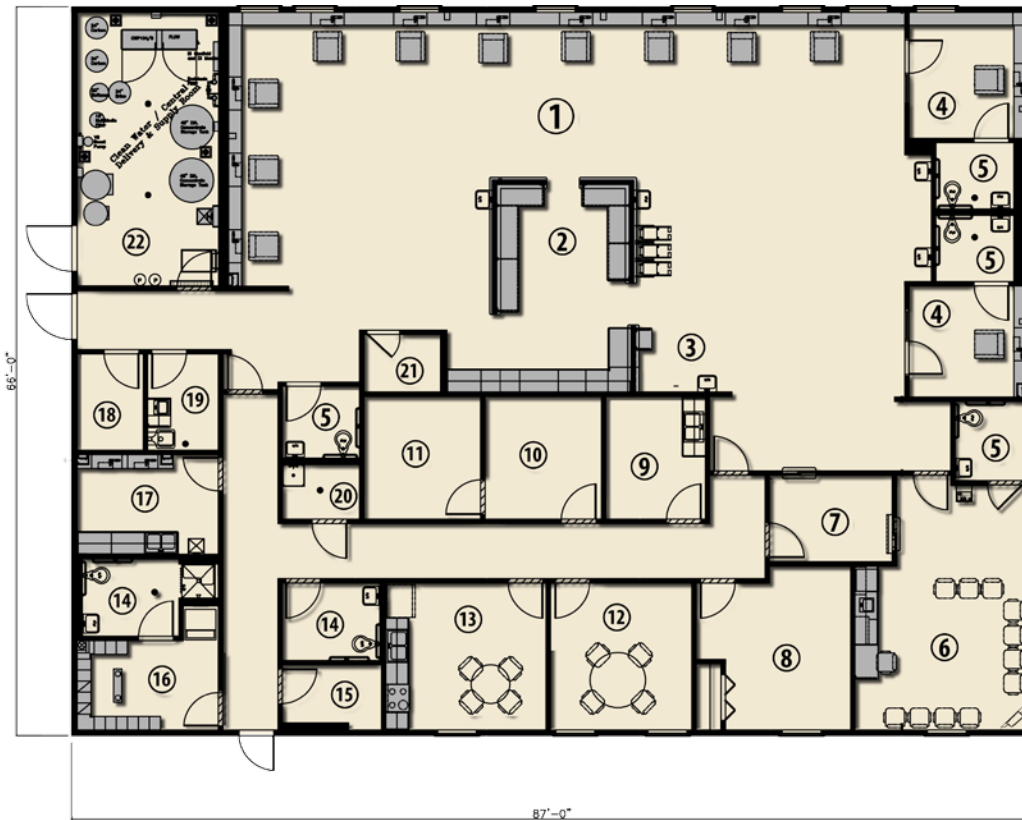
## DIALYSIS MANAGEMENT GROUP

MedCon-USA was responsible for all project engineering working in close collaboration with the Tribal Employment Rights Office (TERO), certified Native American contractors from the reservation were sub contracted for site work on the project.

Due to the accelerated schedule, all the main components for the R.O. water system were installed at Whitley's off-site construction facility. Comprehensive construction management approaches were used in developing scopes of work and task sequences to reduce cost to the client and overall project time line.

The building featured specialty systems such as a geothermal HVAC with (12) 350' deep wells. An emergency generator can power the entire building in the case of power loss. The exterior finishes of the building were selected to withstand frequent sustained winds exceeding 90 miles per hour.

# Porcupine Dialysis Clinic



## FLOOR PLAN

- (1) DIALYSIS TREATMENT
- (2) NURSE'S STATION
- (3) PATIENT PREP AREA
- (4) ISOLATION ROOMS
- (5) PATIENT RESTROOMS
- (6) WAITING ROOM
- (7) RECEPTIONIST
- (8) BUSINESS OFFICE
- (9) EXAM ROOM
- (10) CLINICAL MANAGER
- (11) STORAGE
- (12) CONFERENCE ROOM
- (13) STAFF ROOM
- (14) STAFF RESTROOM
- (15) ELECTRICAL / IT ROOM
- (16) LOCKER ROOM
- (17) BIOMEDICAL ROOM
- (18) BIOHAZARD

- (19) SOILED UTILITY ROOM
- (20) JANITOR'S CLOSET
- (21) CLEAN UTILITY ROOM
- (22) CENTRAL SUPPLY / DELIVERY ROOM



## KEY FACTS

**PROJECT NAME**  
PORCUPINE DIALYSIS CLINIC

**LOCATION**  
SHARPS CORNER, SOUTH DAKOTA

**PARTNERS**  
MEDCON - USA TEAM

**PROJECT TYPE**  
DIALYSIS CLINIC

**BUILDING SIZE:**  
5,742 SQ. FT.

**MODULES:**  
7 UNITS

