Staff Summary Report



Development Review Commission Date: 09/28/10 Agenda Item Number: ____

SUBJECT: Hold a public meeting for a Development Plan Review for CITY OF TEMPE SOUTH

WATER TREATMENT PLANT ENVIRONMENTAL LABORATORY located at 6600

South Price Road.

DOCUMENT NAME: DRCr_SWTP_EnvLab_092810.doc PLANNED DEVELOPMENT (0406)

COMMENTS: Request for CITY OF TEMPE SOUTH WATER TREATMENT PLANT

ENVIRONMENTAL LABORATORY (PL100054) (City of Tempe, property owner; James W. Dettmer, PE, Malcolm Pirnie, Inc., applicant) consisting of the addition to the South Water Treatment Plant of a 14,609 s.f. freestanding building on a +/- 53.37 acre site, located at 6600 South Price Road in the AG, Agricultural District. The request includes

the following:

DPR10149 – Development Plan Review including site plan, building elevations, and

landscape plan.

PREPARED BY: Kevin O'Melia, Senior Planner (480-350-8432)

REVIEWED BY: Lisa Collins, Deputy Community Development Director - Planning (480-350-8989)

LEGAL REVIEW BY: Teresa Voss, Assistant City Attorney (480-350-8814)

DEPARTMENT REVIEW BY: N/A

FISCAL NOTE: N/A

RECOMMENDATION: Staff – Approval, subject to conditions

ADDITIONAL INFO: Gross/Net site area

Total Building area 40,772 s.f. (existing buildings) + 14,609 s.f. (Env. Lab.) = 55,381 s.f. (total)

Lot Coverage 2.3 % (25.0 % maximum allowed) Building Height 27.0 ft. (30.0 ft. maximum allowed)

+/- 53.37 acres

Building Setbacks +/- 86.0 ft. front (east), +/- 853.0 ft. side (north), +/- 1311.0 ft.

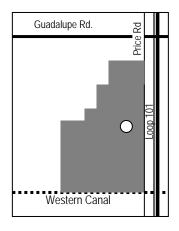
rear (west) (40ft., 20 ft., 35 ft. minimum required setbacks)

Landscape area 19.6 acres (existing) + 1.4 acres (proposed) = & Coverage 21.0 acres (total); 39.3 % (no standard required)

Vehicle Parking 89 spaces provided (89 minimum required per DSM10018)

Bicycle Parking 4 spaces (4 minimum required)

The applicant is requesting approval of a freestanding Environmental Laboratory for the South Water Treatment Plant. The proposed Environmental Laboratory is on the north side of the Price Road main entrance drive and is to the northeast of the existing Environmental Services Building. Associated site and landscape improvements including the reconfiguration of the parking areas on both sides of the Price entrance drive are included with this scope of work. A neighborhood meeting is not required for consideration of this request.



PAGES: 1. List of Attachments

- 2-3. Comments / Reasons for Approval
- 3-5. Conditions of Approval
- 6-7. Code/Ordinance Requirements
- 8. History & Facts / Zoning & Development Code Reference

ATTACHMENTS:

- Location Map
- 2. Aerial Photo
- 3-4. Letter of Explanation
- 5. Site Vicinity Map
- 6. Project Area Site plan
- 7. Overall Site Plan/ Cover Sheet
- 8-9. Site Data and Parking Calculations
- 10-11. North Half Demolition and Site Plans
- 12-13. South Half Demolition and Site Plans
- 14-15. Building Sections and Floor Plan
- 16-17. Exterior Building Elevations, Keynotes and Material Legend
- 18-19. Landscape Plan and Landscape Materials List
- 20-21. Existing Native/Arid Plant Inventory Plan and Landscape Inventory List

COMMENTS:

The South Water Treatment Plant is located west of the Loop 101, is south of Guadalupe Road and is north of the Western Canal. The Plant is accessed by the south bound Price Frontage Road. The major buildings of the plant are clustered at the entrance to the plant on Price Road. The Environmental Laboratory is proposed to join those buildings. Associated work includes the replacement of the two existing small parking lots flanking the entrance drive, the reconfiguration of surface retention basins adjacent to these parking areas and the augmentation of existing native and arid-adapted landscape within the scope of work. The request includes a Development Plan Review for the Environmental Laboratory and associated site and landscape improvements.

The South Water Treatment Plant is within the Agricultural District. A zoning administrator's opinion has allowed the expansion of the Treatment Plant to include the Environmental Laboratory and has fixed the required parking quantity for the plant, including the Environmental Laboratory, at 89 spaces. The applicant asks that the Development Review Commission approve the Development Plan Review request. This work is part of ongoing improvements at the South Water Treatment Plant.

PUBLIC INPUT

- A neighborhood meeting is not required for the planning entitlement being sought.
- Public input has not been received by staff concerning the proposed development or the entitlement requests.

PROJECT ANALYSIS

DEVELOPMENT PLAN REVIEW

Site Plan

The proposed Environmental Laboratory is functionally interconnected with the Environmental Services Building and is necessarily adjacent to that building. A suitable site that also would relate to the Price Road entrance led to the placement of the Laboratory to the northeast of the Environmental Services Building. This location has displaced parking, retention and native landscape areas installed with the Environmental Services Building. Replacement of parking and retention without displacing other functions of the treatment plant is a key part of the site plan solution.

Building Elevations

This is a tall one-story building with wide overhangs supported on exposed steel joists, columns and cantilevered beams. The building forms include exposed honed-face masonry surfaces of two integral colors (black and bone) that create a horizontal striped effect, exterior plaster surfaces (off-white) with regularly spaced horizontal control joints, bronze anodized aluminum frame windows with reflective bronze insulated glazing in horizontal bands. There also are two tall elements sheathed with copper panels. These panels are jointed to resemble the running bond of the masonry and will be allowed to weather naturally to a reddish-brown. Fenestration in these elements is sized to follow the copper panel joints. The main roof is concealed behind parapet. The outlying, gently sloping roofs and overhangs are standing seam metal. The intricately-woven composition of materials and colors overall belies a simple floor plan.

Landscape Plan

A native and arid-adapted plant palette has been previously established at the Water Treatment Plant entrance. Many of these specimens are proposed to be displaced by the addition of the Environmental Laboratory and the reconfiguration of associated parking areas and retention basins. In accordance with State Agricultural Department criteria, a plant inventory has been taken to record, salvage and transplant as many of these specimens as possible. Plant additions to this palette follow the native / arid-adapted palette that was previously established.

Section 6-306 D Approval criteria for Development Plan Review

Placement, form, and articulation of buildings and structures provide variety in the streetscape. The proposed Environmental
Lab and the existing Environmental Services and Administration Buildings are each distinct from each other but together are
alike in overall form, site composition and street presence. The building is appropriately scaled with respect to its neighbors.
Landscape that is displaced will be replaced, in large part with the same specimens, in order to re-create the existing native, aridadapted plant fabric as viewed from the street.

- 2. Building design and orientation, together with landscape, combine to mitigate heat gain/retention while providing shade for energy conservation and human comfort. Broad overhangs assist with creating a shaded zone for an enhanced pedestrian experience around the Environmental Lab
- 3. *Materials are of a superior quality, providing detail appropriate with their location and function while complementing the surroundings.* Few buildings make use of materials such as copper panels, exposed structural steel and honed-face concrete masonry units. These materials are skillfully articulated and composed in a manner to respond to the climate and meet the requirement of a finely-tuned design.
- 4. *Vehicular circulation is designed to minimize conflicts with pedestrian access and circulation.* Refer to the site and landscape plans.
- 5. The design of the Environmental Lab appropriately integrates Crime Prevention through Environmental Design principles such as territoriality, natural surveillance, access control, and activity support. Refer to the building elevations, site and landscape plans.
- 6. Landscape accents and provides delineation from parking, buildings and driveways. Refer to the landscape plan.
- 7. Security lighting is compatible with the adjoining buildings and uses and will not create negative effects. Security lighting will not exceed maximum height established for an agricultural (residential) district.

Conclusion

Based on the information provided by the applicant, staff recommends approval of the requested Development Plan Review. The request meets the required criteria and will conform to the conditions of approval.

REASONS FOR APPROVAL:

- 1. The project meets the General Plan Projected Land Use (Work Industrial) for this site.
- 2. The project will meet the development standards required under the Zoning and Development Code.
- 3. The proposed project meets the approval criteria for Development Plan Review.

CONDITIONS OF APPROVAL:

EACH NUMBERED ITEM IS A CONDITION OF APPROVAL. THE DECISION-MAKING BODY MAY MODIFY, DELETE OR ADD TO THESE CONDITIONS.

DPR10149

CONDITIONS OF APPROVAL

General

1. Submit construction documents to the Community Development Building Safety Division for building permit by September 28, 2011 or Development Plan Review approval will expire. Subsequently, an expiration of the building plan check period or issued building permit will result in expiration of the development plan review approval.

Site Plan

- 2. Storage yard site wall located within a site fenced and gated enclosure and constructed with alternating steel perforated mesh field and fully opaque metal circles is acceptable.
- 3. If an additional refuse container is required, construct pads and bollards in accordance with DS-116 except delete the enclosure walls.
- 4. Paint utility boxes in a neutral color that compliments the building color. Do not paint over warning decals or other identifiers.

Floor Plans

- 5. The Service Room # 114 double doors, as is indicated, are not required to have vision panels.
- 6. Restroom and shower room security:
 - a. Lights in restrooms:
 - 1) Provide 50% night lights
 - 2) Activate by automatic sensors, key or remote control mechanism
 - b. Single user shower room door hardware: Provide a key bypass on the exterior side of the door.

Building Elevations

- 7. The materials and colors are approved as presented:
 - a. CMU: Trendstone Honed Face Masonry, Color: MW Bone
 - b. CMU: Trendstone Honed Face Masonry, Color: Black
 - c. EIFS: To match Frazee: Duck Down, #CL2831W
 - d. COPPER: Custom Fabricated Panel System, Natural Color Variations
 - e. METAL: Standing seam metal roofing, color to match Frazee: Duck Down #CL2831W
 - f. METAL: Painted to match Frazee: Mascara #CL3207N
 - g. GLAZING: Solarbronze and Solarban 60 Insulated Window Units with Bronze Anodized Frame
 - h. METAL: Fascia and doors and frames, color to match Frazee: Equator #CL2654M

Provide main colors and materials with a light reflectance value of 75 percent or less. Specific colors and materials exhibited on the materials sample board are approved by planning staff. Submit any additions or modifications for review during building plan check process.

- 8. Allow copper panels to weather naturally. Do not treat panels to artificially create a green patina.
- 9. Provide secure roof access from the interior of the building (room 112) as indicated. Do not expose roof access to public view. Conceal roof drainage system for portion of roof behind parapet within the interior of the building. Incorporate lighting, address signs, fire department connection and incidental equipment attachments (alarm klaxons, security cameras, etc.) where exposed into the design of the building elevations. Do not locate exposed conduit, piping, or similar features on the exposed surfaces of the building.
- 10. Locate the electrical service entrance section inside the building as is indicated.
- 11. Provide laminated or other hardened glazing in lower panes of divided pane window wall (up to 5'-0" height above finish floor) as a security provision against unauthorized entry. Do not propose landscaping or screen walls that conceal area around lower window panes.
- 12. Provide open metal railing in lieu of masonry screen walls at ramp at northwest corner of building.

Lighting

13. Illuminate building entrances from dusk to dawn.

Landscape

- 14. The plant palette is approved as proposed and specified on the landscape plan. Any additions or modifications may be submitted for review during building plan check process.
- 15. Irrigation notes:
 - a. Provide pipe distribution system of buried rigid (polyvinylchloride), not flexible (polyethylene). Use of schedule 40 PVC mainline and class 315 PVC ½" feeder line is acceptable. Class 200 PVC feeder line may be used for sizes greater than ½". Provide details of water distribution system.
 - b. Locate valve controller outside in a vandal resistant housing within the treatment plant perimeter or locate controller within the building.
 - c. Conceal valve and power conduits within the exterior wall cavity. Exposed conduit is not allowed.
 - d. Hardwire power source to controller. A receptacle connection is not allowed.
 - e. Repair portions of existing irrigation system damaged by this work.
 - f. During construction period, do not allow plants that previously have had an irrigation system to go through a period without irrigation. Provide temporary irrigation system for these specimens that remain.
 - g. Design automatic irrigation so existing plants that require irrigation are irrigated as part of the reconfigured system.
- 16. Remove soil compaction in planting areas. Remove construction debris from planting areas prior to landscape installation.
- 17. Top dress planting areas with a rock or decomposed granite application of 2" uniform thickness that matches the existing rock

groundcover. Do not underlay rock or decomposed granite application with plastic. Do not introduce rock groundcover that is greater than 2" and less than 12" diameter unless each piece is secured two-thirds into concrete bedding.

Signage

- 18. Provide site directory sign in entrance drive area outside of fence and gates. Directory sign may include only the buildings that are accessed by the public. Directory sign is subject to Water Utilities Division Security Unit review and approval. If approved, identify buildings by letter designation on the directory sign. Obtain a sign permit for the directory sign.
- 19. Provide one address number sign on the east elevation of the building. Conform to the following for building address signs.
 - a. Compose address sign of street number only, do not include street name.
 - b. Compose of 12" high, individual mount, metal reverse pan channel numbers.
 - c. Provide dedicated light source: either halo illuminate numbers or illuminate numbers from above. If the latter, place light source 18" above the numbers and do not exceed the height of the adjacent parapet or top of canopy.
 - d. Place address sign near top of elevation at location indicated on the Site Plan Review mark-up, dated March 03, 2010 and coordinate location of sign with position of trees to avoid potential visual obstructions.
 - e. Affix building letter designation to the building in a manner so the letter is not mistaken for the street address. Provide letter sign of same material, size and illumination standard as that for street number sign. Locations of building letter signs are subject to Water Utilities Department Security Unit review and approval.

CODE/ORDINANCE REQUIREMENTS:

THE BULLETED ITEMS REFER TO EXISTING CODE OR ORDINANCES THAT PLANNING STAFF OBSERVES ARE PERTINENT TO THIS CASE. THE BULLET ITEMS ARE INCLUDED TO ALERT THE DESIGN TEAM AND ASSIST IN OBTAINING A BUILDING PERMIT AND ARE NOT AN EXHAUSTIVE LIST.

- Specific requirements of the Zoning and Development Code (ZDC) are not listed as a condition of approval, but will apply to
 any application. To avoid unnecessary review time and reduce the potential for multiple plan check submittals, become familiar
 with the ZDC. Access the ZDC through www.tempe.gov/planning/documents.htm or purchase from Community Development.
- SITE PLAN REVIEW: Verify all comments by the Public Works Department, Community Development Department, and Fire
 Department given on the Preliminary Site Plan Review dated March 03, 2010. Direct questions that arise related to specific
 comments to the appropriate department, and coordinate any necessary modifications with all concerned parties prior to
 application for building permit.
- STANDARD DETAILS: Access standard engineering details at this link: www.tempe.gov/engineering/standard_details.htm or purchase book from the Public Works Engineering Division.
- WATER CONSERVATION: Under an agreement between the City of Tempe and the State of Arizona, Water Conservation
 Reports are required for landscape and domestic water use for this project. Have the landscape architect and mechanical
 engineer prepare reports and submit them with the construction drawings during the building plan check process. Report
 example is contained in Office Procedure Directive # 59. Refer to this link:
 www.tempe.gov/bsafety/Applications_Forms/HandoutsFAQs/Water_Conservation.pdf. Contact Public Works Water Department
 Water Conservation Division with questions regarding the purpose or content of the water conservation reports.

SECURITY REQUIREMENTS:

- Provide method of override access for Police Department to controlled access areas in accordance with Water Utilities
 Department Security Unit review and approval.
- Design building entrances to maximize visual surveillance of vicinity. Limit height of nearby walls and shrubs. Design corners to discourage to opportunity for ambush. Provide distances of at least 21'-0" between a pedestrian path of travel and any hidden area allow for increased reaction time and safety.
- Follow design guidelines listed under ZDC Appendix A. In particular, reference the CPTED principal listed under A-II Building Design Guidelines (C) as it relates to the location of pedestrian environments and places of concealment.
- Provide a security vision panel at east and south service doors consisting of a 3" wide high strength plastic or laminated glass window, located between 43" and 66" from the threshold. Refer to ZDC Sec. 4-406.

FIRE

- Locate Fire Department Connection on the main response side of the building. Identify the main response side with the Fire Department.
- Clearly define the fire lanes in the treatment plant parking drive aisles north and south of the existing Environmental Services Building and the proposed Environmental Laboratory, including the extent of the "front-in, back out" fire lane in the reconfigured parking area south of the proposed lab. Ensure that there is at least a 20'-0" horizontal width, and a 14'-0" vertical clearance from the fire lane surface to the underside of tree canopies or overhead structures. Ensure that there is no more than 150'-0" (for hose pull) measured from a deployed emergency truck in the lane and the farthest point of the ground floor of each building. Layout and details of fire lanes are subject to Fire Department approval.
- Locate fire hydrants per IFC 2006 Section 508.
- Submit hazardous materials form that details the items being stored for this facility.

BUILDING

- Clearly indicate property lines, the dimensional relation of the buildings to the property lines and the separation of the buildings from each other.
- Measure height of building from top of curb at a point adjacent to the center of the front property line.
- Raise parapets as needed or otherwise screen roof mount mechanical equipment on four sides.

ENGINEERING:

- Underground utilities except high-voltage transmission line.
- 100 year onsite retention and a Drainage Plan are required.
- Coordinate site layout with public and private utility providers and provide adequate access easements.
- Verify location of any easements or property restrictions in work area to ensure no conflict exists with the site layout or foundation design. No excavation or retention allowed over 60" diameter water line.
- No structures, lights, poles, deep-rooted trees or plants (except in pots) and etc., are allowed in easements or above underground utilities.
- Provide letter designations for each of the buildings in the Water Treatment Plant including the Environmental Laboratory.
 Contact Stuart Lane (480-350-8200 or stuart_lane@tempe.gov) to initiate this process.
- REFUSE: Contact Public Works Sanitation Division to verify that existing refuse collection system will be adequate also for this addition. Ensure adequate maneuvering for refuse trucks on site in accordance with ZDC Sec. 4-502 G.

PARKING SPACES:

- Provide parking screen wall or berm of minimum 3'-0" height above parking paving between parking areas and Price Road in accordance with ZDC Sec. 4-706 E.
- Provide accessible vehicle parking in accordance with the Americans with Disabilities Act of 1990 (42 U.S.C.A. §12101 ET SEQ.) and the Code of Federal Regulations Implementing the Act (28 C.F.R., Part 36, Appendix A, Sections 4.1 and 4.6).
 Refer to Standard Detail T-360 for parking layout and accessible parking signs.
- Provide parking loop/rack per standard detail T-578. Provide 2'-0" by 6'-0" individual bicycle parking spaces. One loop may be used to separate two bike parking spaces. Provide clearance between bike spaces and adjacent walkway to allow bike maneuvering in and out of space without interfering with pedestrians, landscape materials or vehicles nearby.

• LIGHTING:

- Design site security light in accordance with requirements of ZDC Part 4 Chapter 8 (Lighting) and ZDC Appendix E (Photometric Plan).
- Indicate the location of all exterior light fixtures on the site, landscape and photometric plans. Avoid conflicts between lights and trees or other site features in order to maintain illumination levels for exterior lighting.
- Provide freestanding lights of maximum 18'-0" height, including bases, in accordance with ZDC Sec. 4-803 C.

LANDSCAPE:

- Regarding native and protected plants, move, preserve in place, or demolish native or "protected" trees and plants per State
 of Arizona Agricultural Department standards. File Notice of Intent to Clear Land with the Agricultural Department. Notice of
 Intent to Clear Land form is available at www.azda.gov/ESD/nativeplants.htm. Submit copy of notice with plant inventory
 during building plan check process.
- Provide north parking area shade following ZDC Sec. 4.704 A, using either option 1 as is indicated or option 2. Respect the location of underground retention structure in this area.
- Required parking landscape islands each require five plant groundcovers.
- Select shrubs and groundcovers of maximum 2'-0" natural mature height when they are located within 6'-0" of pedestrian paving and parking.
- Select shrubs and groundcovers of maximum 3'-0" natural mature height when they are located within 12'-0" of pedestrian paving and parking.
- SIGNS: Obtain sign permit for identification signs. Separate Development Plan Review process may be required for
 identification signs in accordance with requirements of ZDC Part 4 Chapter 9. Directional signs (if proposed) may not require a
 sign permit, depending on size. Directional signs are subject to review by planning staff during plan check process.

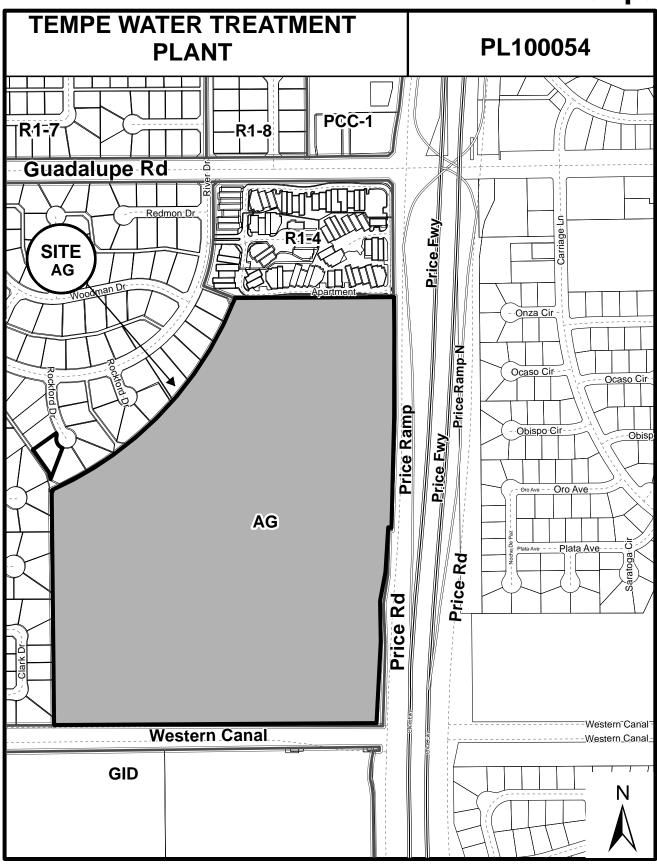
HISTORY & FACTS:

June 6, 1979	The Design Review Board approved building elevations, site and landscape plans for the establishment of a sixty acre water treatment facility at 6600 South Price Road.
November 21, 1984	The Design Review Board approved an extensive expansion to the existing water treatment facility. This expansion includes additional pre-final sedimentation basins and necessary support equipment. The South Water Treatment Plant is located at 6600 South Price Road.
January 17, 1995	The Hearing Officer approved a variance to partially waive the screening requirement for a ground mounted chlorine scrubber mechanism in order to provide for increased worker surveillance and safety. The site is the South Water Treatment Plant at 6600 South Price Road.
October 25, 1995	The Design Review Board Staff approved a fuel storage tank for the South Water Treatment Plant at 6600 South Price Road.
July 28, 1999	The Design Review Board Staff approved the addition of security gates and masonry walls at the South Water Treatment Plant at 6600 South Price Road.
July 17, 2000	The Design Review Board Staff approved two shade canopies for an existing fluoride storage tank and an existing chlorine scrubber unit for the South Water Treatment Plant at 6600 South Price Road.
January 31, 2001	The Design Review Board approved the addition of non-occupied water facilities and minor internal renovations to the plant office and administration building. The site is the South Water Treatment Plant at 6600 South Price Road.
January 15, 2003	The Design Review Board approved the building elevations, site and landscape plans for the Environmental Services Building located at 6600 South Price Road in the AG, Agricultural District.
July 16, 2003	The Design Review Board approved building elevations, site and landscape plans for additions to the existing Disinfection Building and a new Ultra Violet Disinfection Reactor Building to the South Water Treatment Plant. The South Water Treatment Plant is located at 6600 South Price Road in the AG, Agricultural District.
March 1, 2006	The Design Review Board approved the building elevations and site plan for South Water Treatment Plant Potable Well # 15 located at 6600 South Price Road in the AG, Agricultural Zoning District.
April 20, 2006	The Design Review Board staff approved the building elevations and site plan for an 800 s.f. addition to the Administration Building. This site is located at 6600 South Price Road in the AG, Agricultural Zoning District.
August 19, 2010	The Zoning Administrator issued an opinion that granted a waiver of Use Permit for the addition of the Environmental Laboratory to the South Water Treatment Plant in the AG District and an interpretation for total required parking for the South Water Treatment Plant including the addition of the Environmental Laboratory. The South Water Treatment Plant is located at 6600 South Price Road in the AG, Agricultural District.

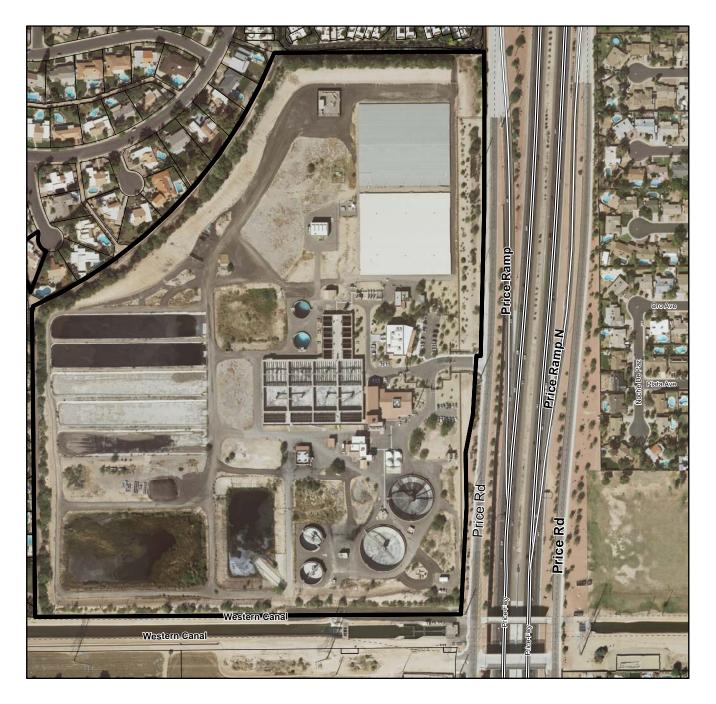
ZONING AND DEVELOPMENT CODE REFERENCE:

Section 6-306, Development Plan Review





Location Map



TEMPE WATER TREATMENT PLANT (PL100048)

City of Tempe South Tempe Water Treatment Plant New Environmental Laboratory Development Plan Review July 27, 2010

Letter of Explanation

The new Environmental Laboratory on the South Tempe Water Treatment Plant (STWTP) has been designed to be an environmentally conscious neighbor to the existing treatment plant and associated buildings, while providing much needed technical space for City staff.

The STWTP is a secure site, as dictated by the Water Utility Department's protocols. As such, it's location on Price Road is surrounded by a berm for visual security and a decorative wrought iron fence for physical security. The new Environmental Laboratory building, as a requirement of its program, had to be located within this secure border. To accomplish this, a landscape and parking area just North of the main entry was slated for the new building, and the building's footprint has been carefully worked into the available space.

Views from Price Road will become more varied as the building will now be visible where extensive berming was located previously.

The building itself responds to its micro and its macro community in several important ways. Large roof overhangs provide shade for the main entry at the south, as well as a secondary employee entry at the north. Many staff will walk from the existing Environmental Services building located to the SW of the proposed Lab, and this walkway will be almost completely shaded via roof overhangs and landscape. The new parking added to the south of the building has been re-considered as well, and provides more logical points of entry for visitors both to the Lab and Environmental Services.

Building facades are broken up via materials, colors, roof overhangs, and height changes. The walls will be constructed of integral color CMU, with varying size banding creating a base and top of wall; a small amount of EIFS for variation; and an accent area adjacent to the entries of natural copper panels, set in a variegated pattern of brick-shaped components.

While some laboratory spaces do not allow view-level windows, these spaces do feature clerestory glazing. Areas which can have daylight, such as the breakroom and office areas, have extensive view-level windows.

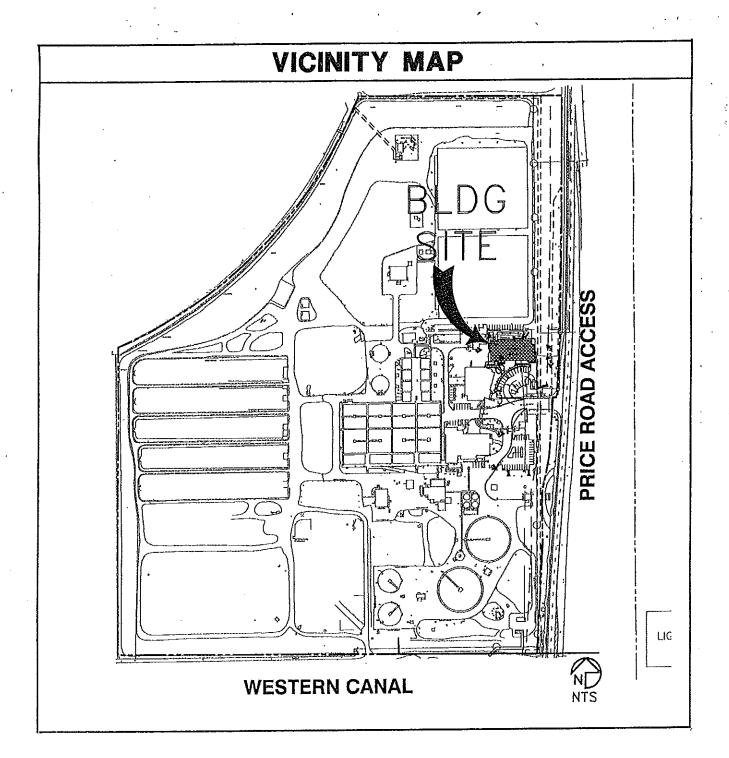
A public space has been created where previously none existed by designing the parking area on a curve, creating an entry plaza with upgraded landscaping, lighting, and paving designs. This area will provide a natural separation between parking area and buildings, as well as providing a shaded walkway.

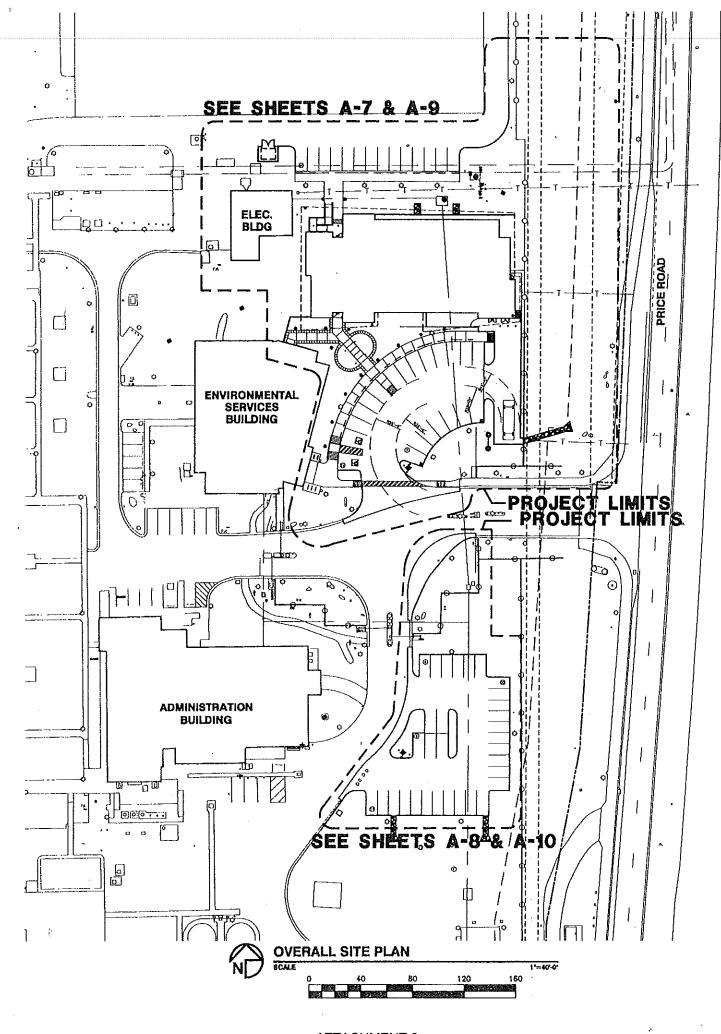
The ADA accessibility of the building is considered via an integral ramp at the north side to access the lower grade in this area. Shade, via an extended roof surface, is provided for the majority of this ramp area.

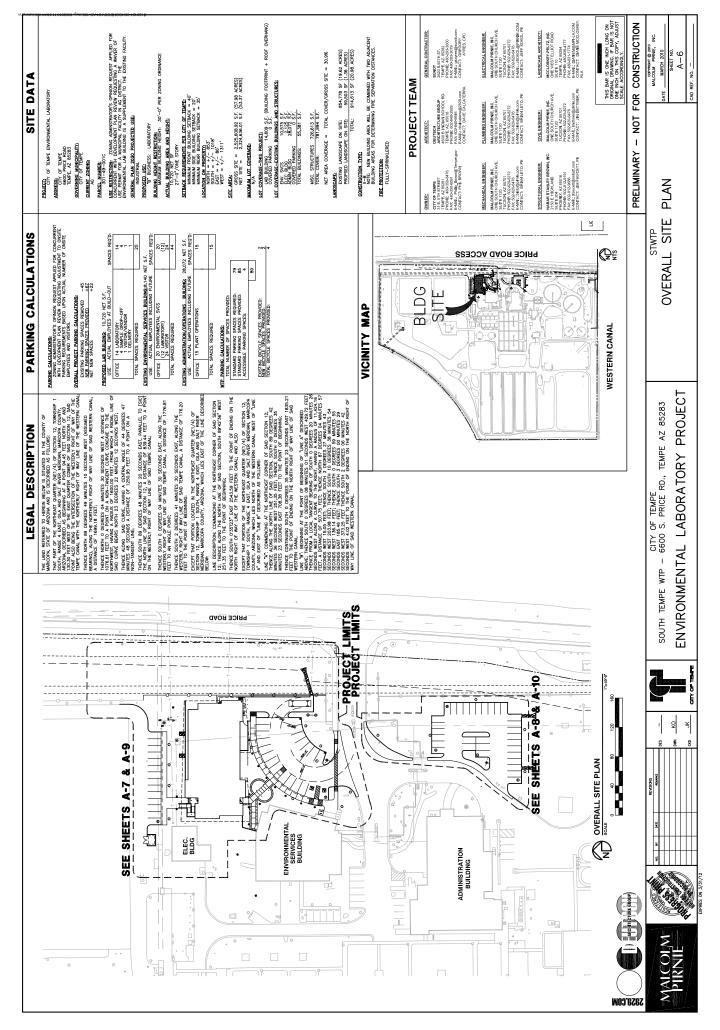
AUG 1 1 2010

Alternative forms of transportation are not available within the STWTP site, but bicycle parking is offered immediately within the gates, and we will increase this existing capacity as part of our project. The two parking lots created as part of the work of this project will each allow employees to park personal vehicles and access the facilities without entering the SWTP site and interacting with larger operational vehicles.

All utilities shall be placed underground and the selected light fixtures on the facades were selected to meet City light level requirements while coordinating with the aesthetic of the facility. Existing pole fixtures will be re-used where possible in the parking lot to create continuity with existing development.







SITE DATA

PROJECT:

CITY OF TEMPE ENVIRONMENTAL LABORATORY

ADDRESS:

CITY OF TEMPE 6600 PRICE ROAD TEMPE, AZ 85283

GOVERNING MUNICIPALITY: CITY OF TEMPE

CURRENT ZONING: AG

PARCEL NUMBER:

301-49-001C

USE RESTRICTION: ZONING ADMINSTRATOR'S OPINION REQUEST APPLIED FOR CONCURRENT WITH DEVELOPMENT PLAN REVIEW REQUESTING A WAIVER OF USE PERMIT FOR A MUNICIPAL FACILITY IN AG DISTRICT. THE TOTAL LAB DIVINION FOR A MUNICIPAL FACILITY IN AG DISTRICT. ENVIRONMENTAL LAB BUILDING IS A SUPPLEMENT TO THE EXISTING FACILITY.

GENERAL PLAN 2030 PROJECTED USE:

INDUSTRIAL

PROPOSED USE:

"B" BUSINESS: LABORATORY

BUILDING HEIGHT RESTRICTION:

MAXIMUM BUILDING HEIGHT: 30'-0" PER ZONING ORDINANCE

ACTUAL BUILDING AREA AND HEIGHT: 10,720 NET SF

27'-0"/ONE STORY

SETBACK REQUIREMENTS PER CITY OF TEMPE:

MINIMUM FRONT BUILDING SETBACK = 40' MINIMUM SIDE BUILDING SETBACK = 20'

MINIMUM REAR BUILDING SETBACK = 35'

LOCATION ON PROPERTY:

NORTH = +/- 853'

SOUTH = +/- 1018'

EAST = +/- 86'

WEST = +/- 1311'

SITE AREA:

GROSS SITE = 2,525,608.92 S.F. (57.98 ACRES) NET SITE = 2,324,636.01 S.F. (53.37 ACRES)

MAXIMUM LOT COVERAGE:

N/A

LOT COVERAGE-THIS PROJECT:

14,609 S.F. (BUILDING FOOTPRINT + ROOF OVERHANG) 0 S.F. LAB BUILDING COVERED PARKING

LOT COVERAGE-EXISTING BUILDINGS AND STRUCTURES:

ENV. SVCS ELEC BLDG ADMIN BLDG

10,575 S.F. 2,125 S.F. 28,072 S.F.

COVERED PARKING

TOTAL BUILDINGS:

O S.F. 55,381 S.F.

MISC. STRUCTURES 726,613 S.F.

TOTAL COVER:

781,994 S.F.

NET AREA COVERAGE = TOTAL COVER/GROSS SITE = 30.9%

LANDSCAPE:

EXISTING LANDSCAPE ON SITE:

854,778 SF (19.62 ACRES)

PROPSED LANDSCAPE ON SITE:

59,503 SF (1.36 ACRES)

TOTAL:

914,613 SF (20.98 ACRES)

CONSTRUCTION TYPE:

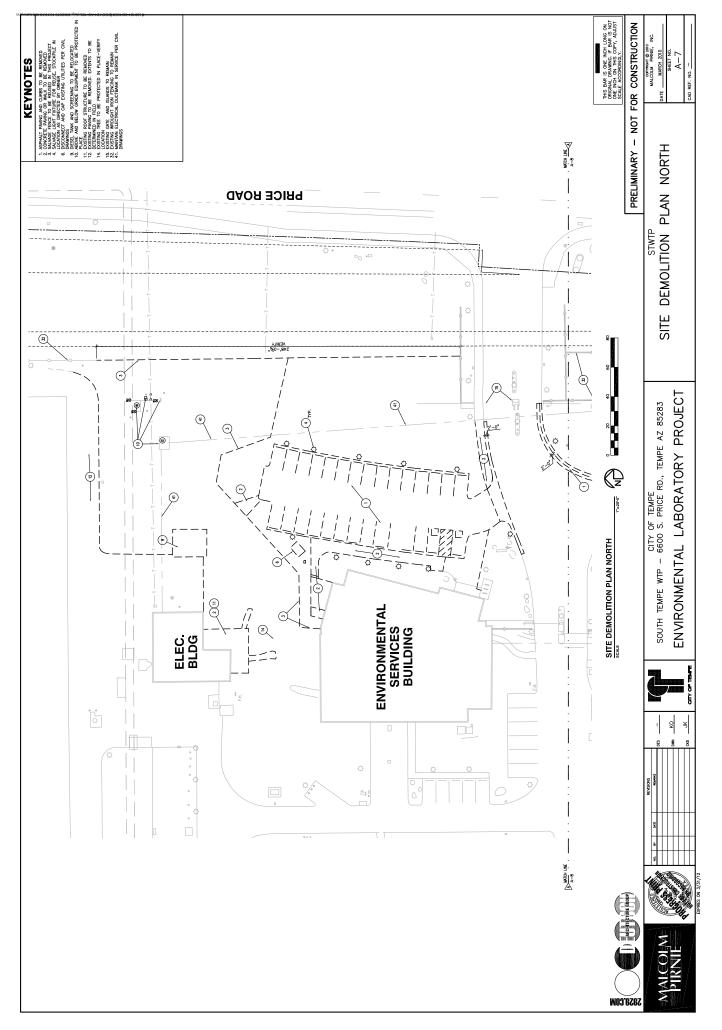
II-B NOTE: NEW BUILDING AREA WILL BE COMBINED WITH TWO ADJACENT BUILDING AREAS FOR DETERMINING FIRE SEPARATION DISTANCES.

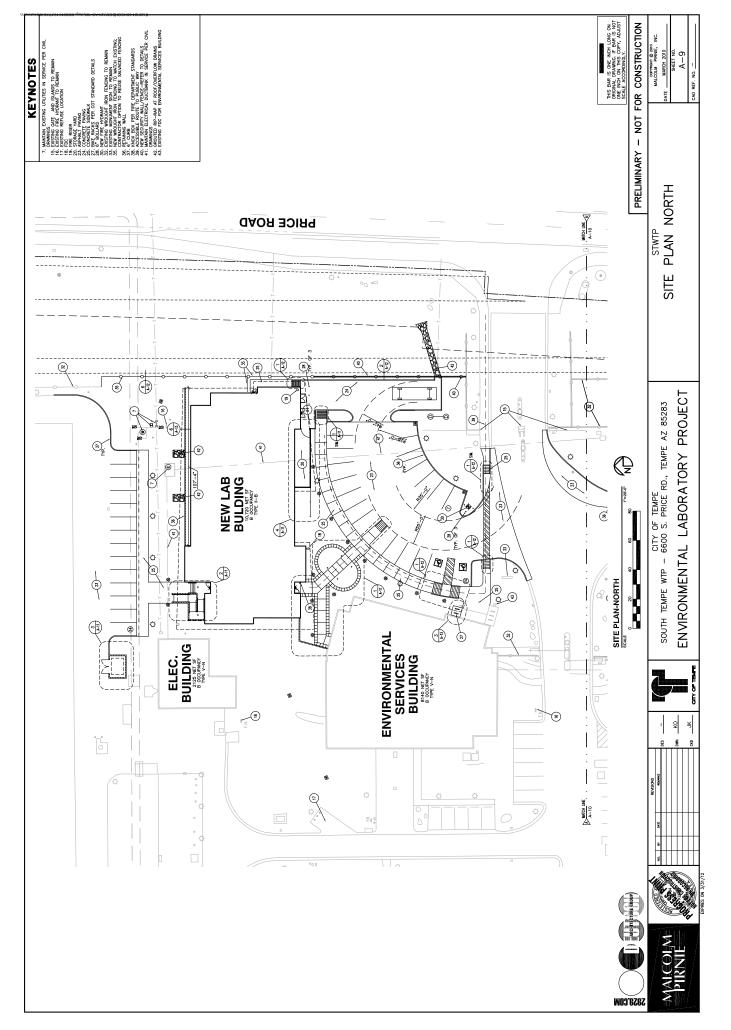
FIRE PROTECTION:

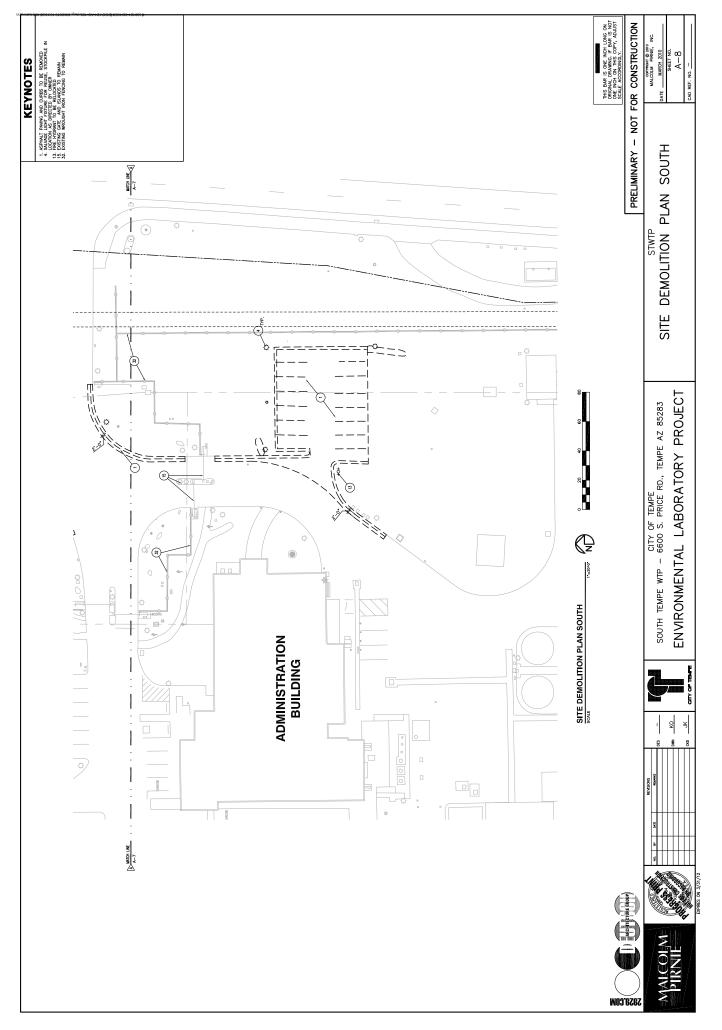
FULLY-SPRINKLERED

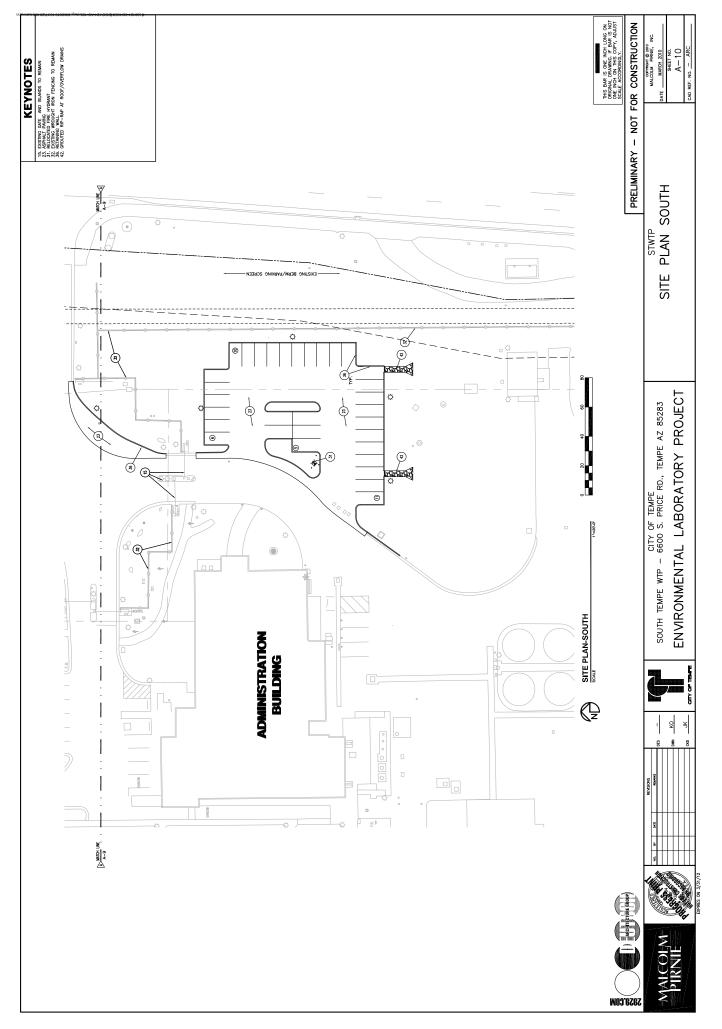
PARKING CALCULATIONS

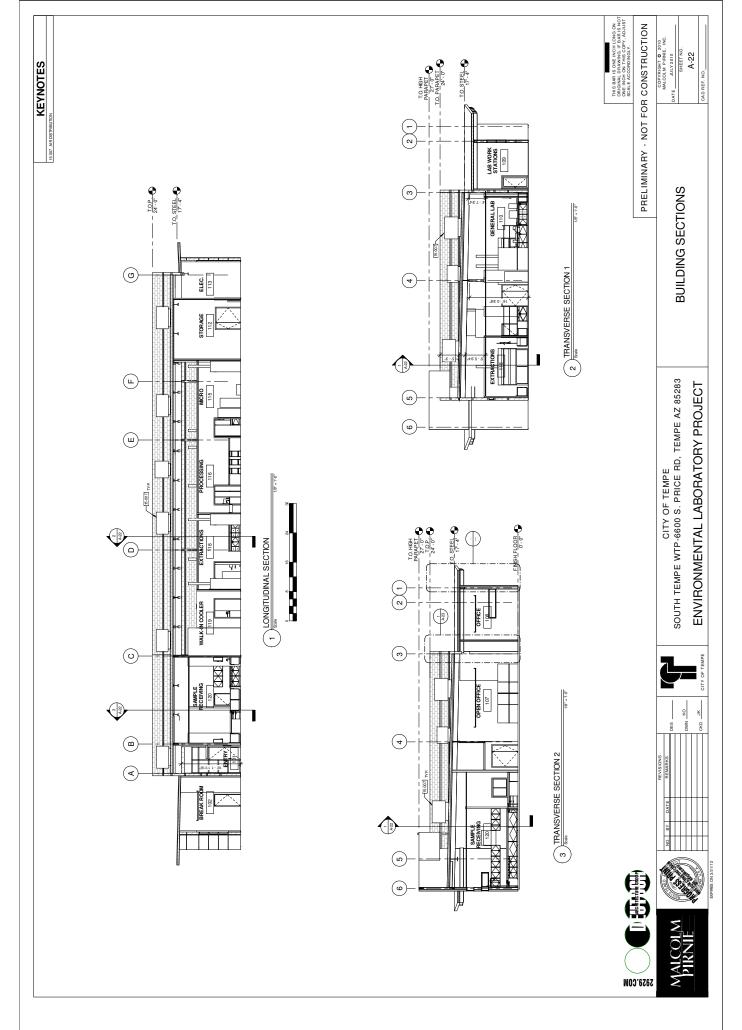
PARKING CALCULATIONS: ZONING ADMINISTRATOR'S OPINION REQUEST APPLIED FOR CONCURRENT WITH DEVEOPMENT PLAN REVIEW REQUESTING ADJUSTMENT TO ONSITE PARKING REQUIREMENTS BASED UPON ACTUAL NUMBER OF ONSITE EMPLOYEES AND VISITORS. OVERALL PROJECT PARKING CALCULATIONS:									
EXISITING PARKING SPACES REMOVED -45 NEW PARKING SPACES PROVIDED +67 NET NEW SPACES +22									
PROPOSED LAB BUILDING: 10,720 NET S.F. USE ACTUAL EMPLOYEES AT BUILD—OUT	SPACES REQ'D:								
OFFICE 14 LABORATORY 4 SAMPLE DROP-OFF 1 VISITOR/VENDOR 1 DELIVERY	14 4 1 1								
TOTAL SPACES REQUIRED	20								
EXISTING ENVIRONMENTAL SERVICES BUILDING: 8,1- USE ACTUAL EMPLOYEES INCLUDING FUTURE	40 NET S.F. RE SPACES REQ'D:								
OFFICE 20 ENVIRONMENTAL SVCS (12 LABORATORY) 24 VISITOR	20 (12) 24								
TOTAL SPACES REQUIRED	44								
EXISTING ADMINISTRATION/OPERATIONS BUILDING USE ACTUAL EMPLOYEES INCLUDING FUTURE	: 28,072 NET S.F. RE SPACES REQ'D:								
OFFICE 15 PLANT OPERATIONS	15								
TOTAL SPACES REQUIRED	15								
WTP PARKING CALCULATIONS: TOTAL NUMBER OF SPACES PROVIDED:									
STANDARD PARKING SPACES REQUIRED: STANDARD PARKING SPACES PROVIDED: ACCESSIBLE PARKING SPACES:	79 85 4								
	89								
EXISTING BICYCLE SPACES PROVIDED: NEW BICYCLE SPACES PROVIDED:									
TOTAL BICYCLE SPACES PROVIDED:	**								

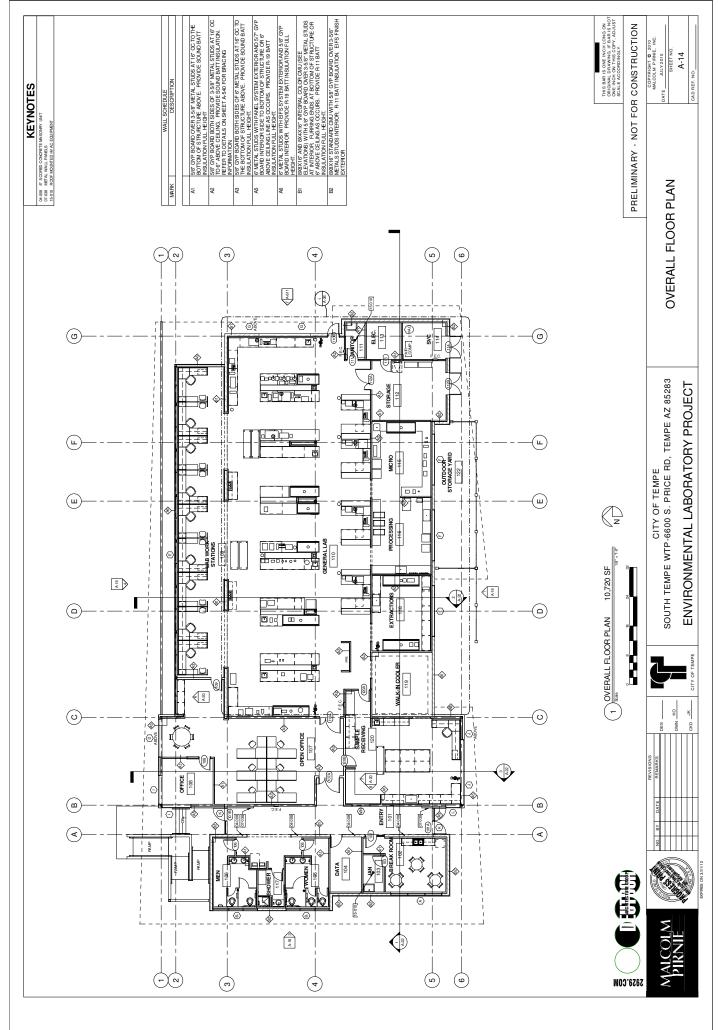


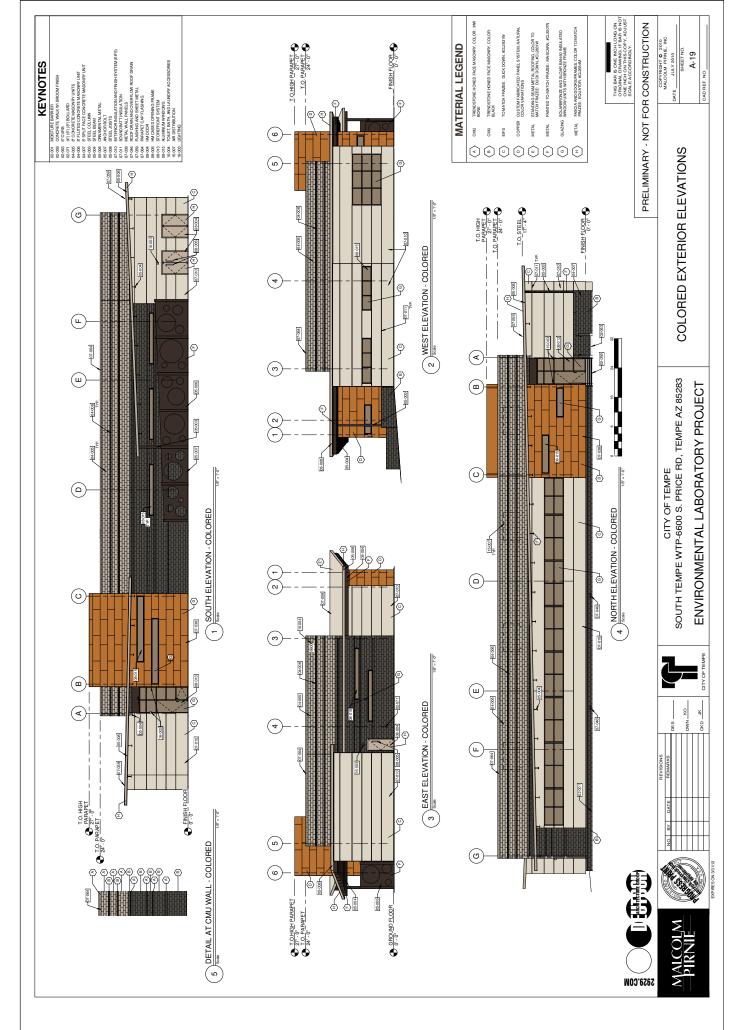










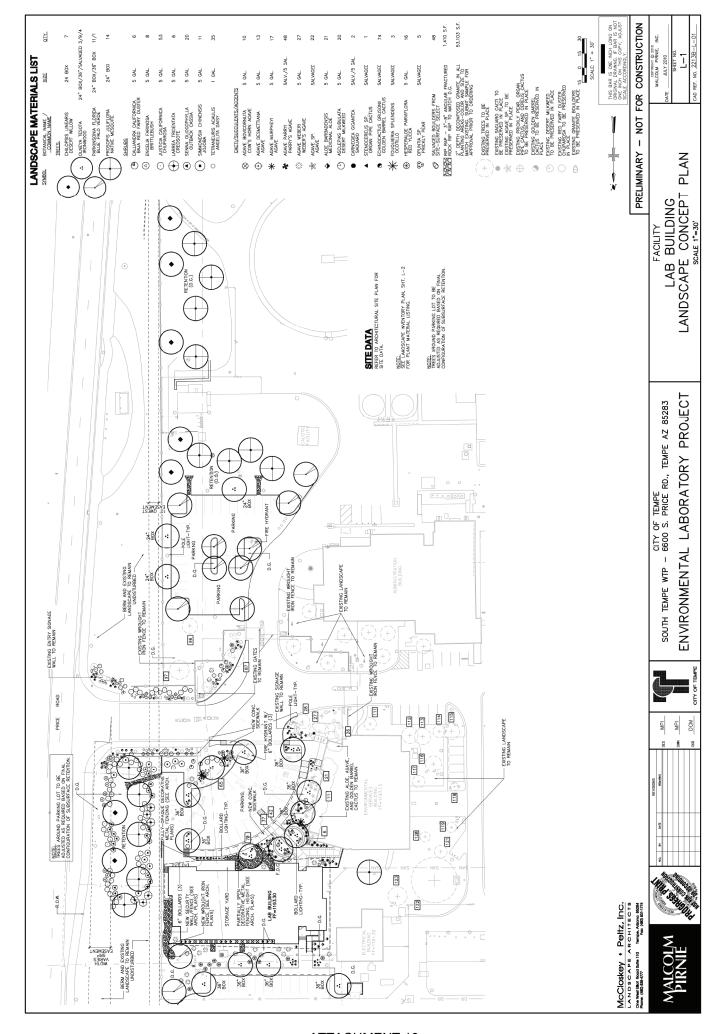


KEYNOTES

- 02-001 MOISTURE BARRIER
- 02-059 CONCRETE WALK W/ BROOM FINISH
- 02-063 6" CURB
- 02-070 GATE
- 02-071 (4") (6") (8") BOLLARD
- 04-005 8" CONCRETE MASONRY UNITS
- 04-006 8" FLUTED CONCRETE MASONRY UNIT
- 04-007 8" SPLIT FACE CONCRETE MASONRY UNIT
- 05-003 STEEL COLUMN
- 05-004 STEEL BEAM
- 05-006 ORNAMENTAL METAL
- 05-007 ANCHOR BOLT
- 05-008 STEEL JOISTS
- 07-010 EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)
- 07-011 SOUND BATT INSULATION
- 07-038 METAL WALL PANELS
- 07-046 ROOF DRAIN AND OVERFLOW ROOF DRAIN
- 07-059 FLASHING AND SHEET METAL
- 07-064 PARAPET CAP FLASHING
- 08-004 HM DOOR
- 08-005 HM CASED OPENING FRAME
- 08-013 STOREFRONT SYSTEM
- 08-015 ALUMINUM WINDOWS
- 10-004 TOILET, BATH, AND LAUNDRY ACCESSORIES
- 15-007 AIR DISTRIBUTION
- 16-003 LIGHTING

MATERIAL LEGEND

A	CMU	TRENDSTONE HONED FACE MASONRY, COLOR: MW BONE
B	CMU	TRENDSTONE HONED FACE MASONRY, COLOR: BLACK
C	EIFS	TO MATCH FRAZEE: DUCK DOWN, #CL2831W
D	COPPER	CUSTOM FABRICATED PANEL SYSTEM, NATURAL COLOR VARIATIONS
E	METAL	STANDING SEAM METAL ROOFING, COLOR TO MATCH FRAZEE: DUCK DOWN, #CL2831W
F	METAL	PAINTED TO MATCH FRAZEE: MASCARA, #CL3207N
$\langle G \rangle$	GLAZING	SOLARBRONZE AND SLOAR BAN 60 INSULATED WINDOW UNITS WITH BRONZE FRAME
$\langle H \rangle$	METAL	FASCIA AND DOORS/FRAMES, COLOR TO MATCH FRAZEE: EQUATOR, #CL2654M



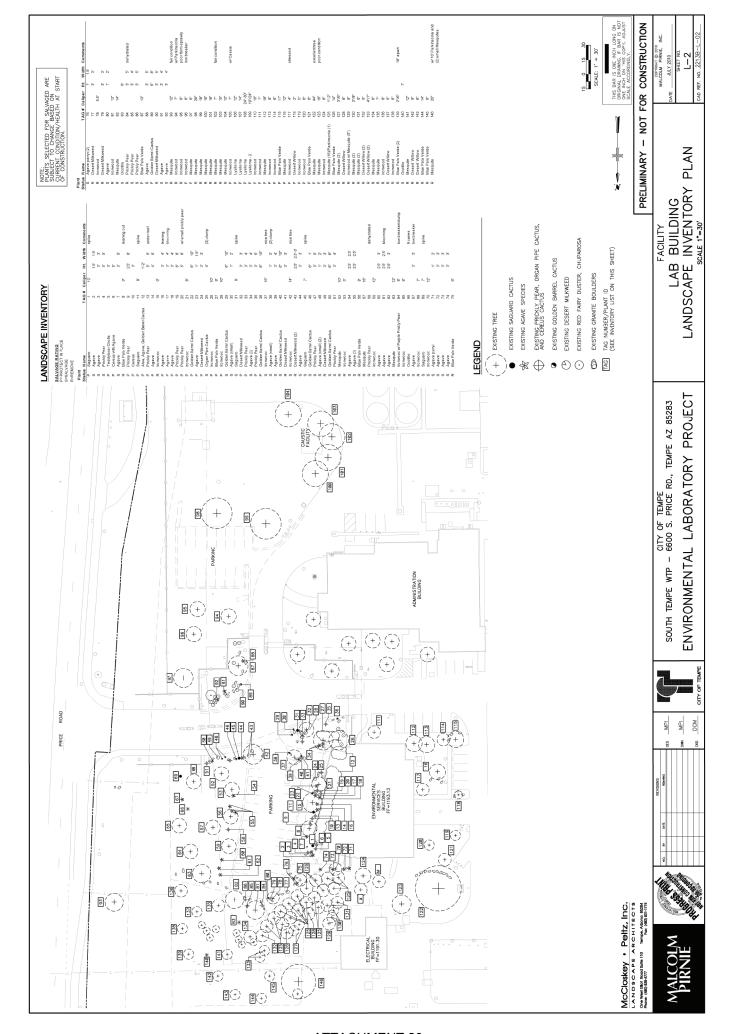
LANDSCAPE MATERIALS LIST

	MADOOM WIARLING MO FIOL										
•	SYMBOL	BOTANICAL NAME / COMMON NAME		SiZE		OTY.					
_		TREES.									
(•)	CHILOPSIS LINEARIS DESERT WILLOW		24 BOX		7						
\geq	, (OLNEYA TESOTA IRONWOOD	24" 80	SIZE	VAGEO	3/9/4					
(PARKINSONIA FLORIDA BLUE PALO VERDE	24"	BOX/36"	вох	11/1					
	(+)	PROSOPIS JULIFLORA NATIVE MESQUITE		24" BOX		14					
		SHRUBS									
	(CALLIANDRA CALIFORNICA BAJA RED FAIRY DUSTE		5 GAL.		6					
	(A)	ENCELIA FARINOSA BRITTLEBUSH		5 GAL.		8					
	•	JUSTICIA CALIFORNICA CHUPAROSA		5 GAL.		53					
	\bigoplus	LARREA TRIDENTATA CREOSOTE		5 GAL.		6					
	(A)	SENNA OLIOGOPHYLLA OUTBACK CASSIA		5 GAL.		20					
	lacksquare	SIMMONDSIA CHINENSIS JOJOBA		5 GAL.		11					
	0	TETRANEURIS ACAULIS ANGELITA DAISY	•	1 GAL.	ı	35					

	CACTI/SUCCULENTS/ACCENTS		
\otimes	AGAVE BOVICORNUTA COW'S HORN AGAVE	5 GAL.	10
\oplus	AGAVE DESMETTIANA AGAVE	5 GAL.	13
*	AGAVE MURPHEYI AGAVE	5 GAL.	17
*	AGAVE PARRYI PARRY'S AGAVE	SALV./5 GAL.	48
***	AGAVE WEBERI WEBER'S AGAVE	5 GAL.	27
兴	AGAVE SP. AGAVE	SALVAGED	. 22
\$	ALOE BARBADENSIS MEDICINAL ALOE	5 GAL.	21
O	ASCLEPIAS SUBULATA DESERT MILKWEED	5 GAL.	20
•	CARNEGIEA GIGANTEA SAGUARO	SALV./5 GAL.	2
*	STENOCEREUS SP. ORGAN PIPE CACTUS	SALVAGED	1
•	ECHINOCACTUS GRUSONII GOLDEN BARREL CACTUS	SALVAGED	74
米	FOUQUIERIA SPLENDENS OCOTILLO	SALVAGED	3
₩	HESPERALOE PARVIFLORA RED YUCCA	5 GAL.	16
♡	OPUNTIA SP. PRICKLY PEAR	SALVAGED	5
Ø	SALVAGED BOULDERS FROM SITE-SURFACE SELECT		48
	RIP RAP - 3"-8" ANGULAR FE ROCK RIP RAP TO MATCH D.G.	RACTURED	1,410 S.F.
	2" DEPTH DECOMPOSED GRANI PLANTING AREAS—COLOR AND : MATCH EXISTING. SUBMIT SAMP APPROVAL PRIOR TO ORDERING	TE IN ALL SIZE TO LE FOR	53,103 S.F.
,~~``			



- EXISTING SAGUARO CACTI TO BE PRESERVED IN PLACE EXISTING AGAVE SP. TO BE PRESERVED IN PLACE Ø
- 彩
- EXISTING PRICKLY PEAR, ORGAN PIPE CACTUS, AND CEREUS CACTUS TO BE PRESERVED IN PLACE
- EXISTING GOLDEN BARREL CACTUS TO BE PRESERVED IN PLACE (3)
- EXISTING DESERT MILKWEED TO BE PRESERVED IN PLACE (3)
- EXISTING RED FARY OUSTER, CHUPAROSA TO BE PRESERVED IN PLACE
 EXISTING GRANITE BOULDERS TO BE PRESERVED IN PLACE
- CD



LANDSCAPE INVENTORY

SALVAGE RATING P=PROTECT W PLACE S=SALVAGE R=REMOVE

NOTE:
PLANTS SELECTED FOR SALVAGED ARE
SUBJECT TO CHANGE BASED ON
CURRENT CONDITION/HEALTH AT START
OF CONSTRUCTION.

	R=REM	OVE						Plant						
	Plant		TAG #	A - II	. 114	11/1/216	Comments		Name	TAG	Calloer	Hŧ.	Wide	Comments
	Status P	N kme Seguaro	1 AU #	10'	r HC	WIGU	spike	511111	Agave parryl (2)	76		1'	1.5	O S III III S III S
	s	Agave	2	10	1.5	1,5'	*piko	R	Desert Mixweed	77		3"	3.	
	5	Agave	ä		3,	3.		R	konwood '	78	5.51			
-	š	Prickly Pear	4		5'	5'		R	DesertMikweed	79		3'	3'	
	P	Teddybear Cholla	5		. 3			s	Agaya	80		1'	2'	
	P	Cereus with Apave	6		5'			R	kauwood	81	13*			
	s	Ageve	7		3,	5'		R	Mesquita	82	141			
	R	Blue Palo Verde	8	6.			leaning out	8	Ocetilo	83		6'		
	þ	Prickly Past	9		2.5	8"		R	Prickly Pear	84		3,	5'	dehydrated
	P	Cereus	10		3,			S	Prickly Pear	85 86		3,	4° 6°	
	P	Saguaro	11	9"			. spike	S P	Prickly Pear	87	131	3	ם	
	P	Aloa, Agave, Golden Barrel Cachis	12		1'-2'	-		5	Blue Palo Verde	68	13	3,	5'	
	P	Prickly Pear	13		5'	5	under roof	P	Agave Golden Barrel Cackus	69		6.	8°	
	.Р	Agave	14		4'	5'		Ŕ	Desert Mikweed	90		3,	6.	
	R	konwood	15	â,	-	41	to a dec	s	Agave	91		3"	4	
	P	Agave	18		3,	4'	leaning	Š	Agave	92		3	4	
	P	Agave	17		3, 3,	4'	prisocrate	Ř	Mesquite	93	12"	•	•	fair condition
	P	Ageva	18		6'	€' 6'		R R	konwood	94	r			w/ Parkinsonla
	P	Prickly Pear Prickly Pear	19 20		5°	e, a	w/ small prickly per	_	krasswood	95	6*			poor form-sprawty
	٥	konwood	21	8"	3	•	AN ELISAN PIRCKLY PER	P	konwaad	96	6' '			lowbreaker
	P	Golden Barrel Cactus	22	•	6*	16"		P	Mesquite	97	6-			
	P	Agave	23		1'	1.61		R	Mesquite	98	28*			
	P	Dasart Milkwaad	24		3,	3,		R	Masquite	99	18"			
	s	Organ Pipe Caches	25		ď	-	(3) siump	R	Mesquita	100	15"			
	P	kouwood	26	10*	•		(a) a.a.y	R	Mesquite	101	18"			
	P	Blue Palo Verde	27	S"				R	Mesquite	102	7			fair condition
	₽	konwood	28	10*				R	Masquite	103	15*			
	\$	Golden Barrel Cactus	29		87	10*		R	Mesquite	104	10"			
		Ageve (smail)	30		1'	2"		P	kenwood	105	7*			w/ Cassle
		Saguero	31	9°			spike	P	Lyskoma	106	12			
	P	Oosert Miskwood	32		3'	31			Lyslioma	107	14"			
	p	Prickly Paar	33		3.	4'			Lysiloma	108	24 -30			•
		Agava (2)	34		3.	4"			Lysitoma - 2	109	10724			
		Prickly Paar	35		3,	51			kerwood	110	10"			
		Golden Barrel Cactus	36		6*	10"			horwood	111	7" 16"			
	-	konwood	37	15"			nica tee		Mesquite Ironnood	113	15 5'			
		Agave (sma¥)	38		1"	2'	(2) clump	-	ronwood konwood	114	6"			
		Agave	39		3'	4'		•	Blue Palo Verde	115	11"			
		Golden Barrel Cactus	40		6-	10*			Mesquie	116	12"			
		Desert Mikweed	41		3'	3.			kouwood	117	Ŧ			stressed
		ronwood	42 43	14"	2.5'	2.5'-3'	nice tree		Desert Willow	118	2			
		Desert Milkweed (2)	44		3'	2.3 ~3 3'			Ironwood	119	51			
		Agave Saguam	45	7		-	spika	P	ironwood	120	6-			
		Golden Berrel Cactus	46	•	6-	1'	-pins	ρ	Bkve Pako Verde	121	6"			
		Prickly Pear	47		3,	5*		P	Mesquita	122	44"			sxcallant tree
		Agave (small) (2)	48		1'	2*		P	Masquite	123	18"			poorcondition
		Desert Milkweed	49		3,	3,			ironwood	124	6			
		Golden Barrel Cactus	50		6*	8"			Mesquite (16)/Parkinsonia (1)	125	1'-2'			
		Prickly Pear	51		3"	-C			Blue Palo Verde	126	14"			
		Masquita	52	10*					Masquita (2)	127	3'/6'			
		konwood	53	5"					DesartWillow	128	8"			
		Agave	54		25	2.5	-		rorwood w Mesquite (3")	129	81			
		(E) eve (A)	55		2.5'	2.5'			Mesquite (2)	130	3"/8"			
		Blue Palo Verde	58	8"					Masquita (2)	131 132	8. 8.			
		Mesquita	57	15"			distribute.		Desert Willow (2) Desert Willow (2)	133	4'A'			
		Prickly Pear	58				dehydratad		Masquita Masquita	134	6'			
		ka rwa od	69 60	12"	2.5'	3,			Mesquite	135	ァ			
		Agave				2.5	Maria de la compansión de		ironwood	138	8"			
		Agave	61 62		2.5' 2.5'	3'	bicoming		Desed VVIIIow	137	5*			
		Agave Heraulis	62 53	12*	₹3	J			lronwood	138	6"			
		Mesquits ironwood w/ Purple Prickly Pear	84	R*			low breaker/ckmp		Blue Palo Verde (2)	139	2"/6"			18° apart
		roswood w Porpie Prickly Peer	85	é-					Ocotilo	140		7		•
		Dogsila	66	-			9 canas		Mesquite	141	12*			
		Agava	67		3.	3'	hwbreaker .		Desert Willow	142	8.			
		ironwood	68	r		_			Desart Willow	143	5			
		Seguam	69	7			spike		8lue Palo Verde	144	14"			
		ronwood	70	12"					Blue Palo Verde	145	6*			
	S	Agave panyl	71		1	2.		R :	Masquita	146	20"			w/ 10° Parkinson/a and
		Agsva	72		3.	3.								(2) smalt Mesquites
		Ageve	73		3,	3'								
		Agava	74		3'	3.		LECENIO						
		Ilria Dala Vanta	75	6"				1 1/2(

LEGEND



EXISTING TREE

EXISTING SAGUARO CACTUS



EXISTING AGAVE SPECIES



EXISTING PRICKLY PEAR, ORGAN PIPE CACTUS, AND CEREUS CACTUS



EXISTING GOLDEN BARREL CACTUS



EXISTING DESERT MILKWEED



EXISTING RED FAIRY DUSTER, CHUPAROSA



EXISTING GRANITE BOULDERS



TAG NUMBER/PLANT ID (SEE INVENTORY LIST ON THIS SHEET)

ATTACHMENT 21