

BRECKENRIDGE

A TRACT OF LAND BEING PART OF U.S. SURVEY 929
AND U.S. SURVEY 1782 AND PART OF FRAC. SECTION 34
TOWNSHIP 47 NORTH, RANGE 2 EAST,
CITY OF LAKE ST. LOUIS, MISSOURI
**TEMPORARY PUMP STATION
FORCE MAIN**

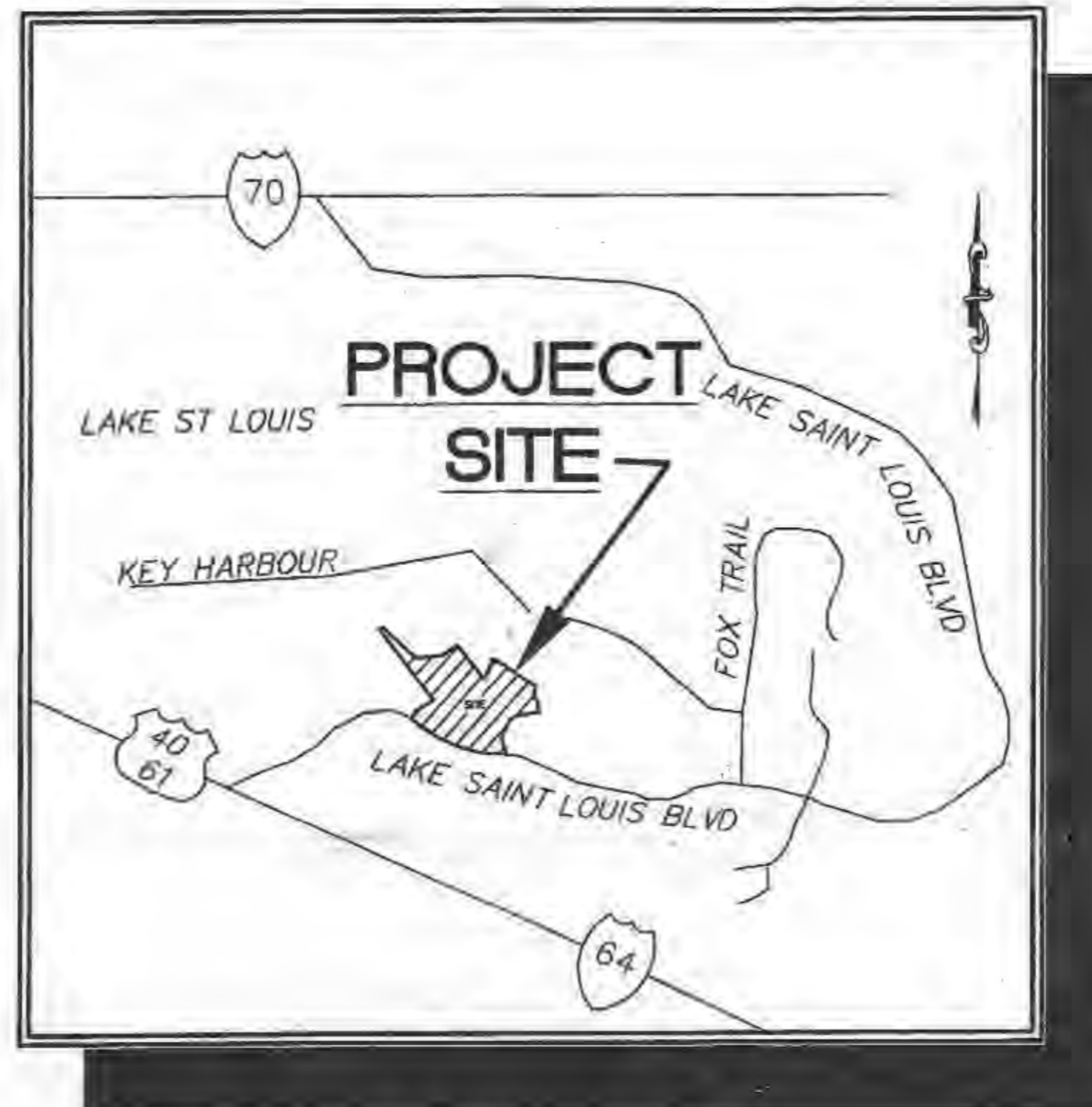
Call BEFORE you DIG
TOLL FREE
1-800-344-7483
MISSOURI ONE-CALL SYSTEM, INC.

GENERAL NOTES

- Gas, water and other underground utilities shall not conflict with the depth or horizontal locations of existing and proposed sanitary and storm sewers, including house laterals.
- Underground utilities have been plotted from available information and, therefore, their locations must be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to grading or construction of improvements.
- All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to at least 90% of maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557) unless otherwise specified by the local governing authority specifications. All tests will be verified by a Soils Engineer.
- All filled places in paved State, County or City roads (highways) shall be compacted to at least 90% of the maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557), unless otherwise specified by local governing authority specifications. All tests will be verified by a Soils Engineer.
- Earth subgrade for paved areas must be compacted to 90% of maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557), and must be inspected and approved by a representative of the City, before paving can commence.
- All grading on City of Lake St. Louis right-of-way shall be seeded and mulched and all disturbed right-of-way markers shall be reset at the completion of grading.
- No area shall be cleared without permission of the developer.
- All grades shall be within 0.2 feet more or less of those shown on the grading plan.
- No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.
- The developer shall contract with a soil consultant firm registered in the State of Missouri during the grading operation to monitor cut and fills and to verify proper compaction has been achieved. A report shall be prepared by the soils consultant and provided to the City for verification of the grading operation.
- Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and roads will be adequately protected.
- The total yardage for this project is based on a 15.0% shrinkage factor.
- The shrinkage factor is subject to change, due to soil conditions, (types and moisture content), weather conditions, and the percent compaction actually achieved at the time year grading is performed. As a result, adjustments in final grades may be required. If adjustments need to be made, the contractor shall contact the project engineer, prior to completion of the grading.
- If straw bales or siltation fence are destroyed by heavy rains, vandalism, etc., they are to be replaced promptly by Contractor.
- All fills under and within 15 feet of the building areas that are deeper than 8 feet shall be compacted to at least 92 percent of the maximum dry density as determined by a modified proctor test. Fills less than 8 feet in building areas should be compacted to at least 90 percent of the maximum dry density as determined by a modified proctor test.
- All utilities shall be placed underground.
- Proposed construction schedule (rough dates):

| | | |
|------------------------|----|--|
| 9-15-2003 - 9-15-2003 | a. | Clearing (estimated duration of exposed area). |
| 9-17-2003 - 10-3-2003 | b. | Grading and construction (installation of temporary sediment control, storm drainage). |
| 10-8-2003 - 10-12-2003 | c. | Final Grading and Landscaping (vegetative cover). |
- Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible or during the next seeding period after grading has been completed.
- When grading operations are completed or suspended for more than 30 days, permanent grass must be established at sufficient density to provide erosion control from the site. Between permanent grass seeding periods, temporary cover shall be provided according to the designated official recommendation.
- All finished grades (areas not to be disturbed by future improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1,000 square feet when seeded.
- Trees, organic debris, rubble, foundations and other deleterious material shall be removed from the site and disposed in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district.
- The developer and his contractor shall be responsible for installing the siltation control as approved by the City of Lake St. Louis prior to the commencement of grading operations.
- According to the F.I.R.M. map #29183C0220 E dated August 2, 1996, this tract is outside the limits of the 100 year flood plain.
- Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR-35.
- All exterior sewer manholes shall be waterproofed on the exterior in accordance with Missouri Department of Natural Resources specifications. 10 CSR 8.120 (7)(E).
- Drick shall not be used on manholes.
- The minimum vertical distance from the low point of the building to the floorline of a sanitary sewer of the corresponding building connection shall not be less than the diameter of the sanitary sewer plus a vertical distance not less than two and one-half feet (2-1/2').
- Straw bales and/or silt fences will be installed, as necessary, in fill conditions, to prevent any erosion, silt, or sediment, from escaping grading site.
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M36, A.A.S.H.T.O. See plans for gauge.
- An storm sewer pipe under pavement, regardless of size shall be reinforced concrete pipe (A.S.T.M. C-76, Class III) unless noted otherwise on the plans.
- All manhole and catch basin tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. All the time of construction stake-out of the sewer lines, all curb and grate inlets will be face staked. If normal face stakes fail in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.
- All standard street curb inlets to have front of inlet 2 1/2 feet behind back of curb.
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- All storm and sanitary sewer trench backfills will be water jettted. Granular backfill will be used under pavement areas. This is to be done in the presence of a City representative. Water jetting shall be at 100% complete and approved prior to paving. Seven days shot pass for setting time prior to paving.
- Barrierales will consist of three 18" x 18" Type IV object markers with 3 Red Button Reflectors on red background mounted on two pound "U" channel sign post, with bottom of the marker 4 feet above top of pavement. (Sign No. 0M4).
- Water lines, valves, slowways, meters and etc., shall meet all specifications and installation requirements of the local governing authority. There shall be a minimum of 18" vertical/10' horizontal separation between all water mains and sanitary services.
- All ductile iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast iron fittings shall conform to A.W.W.A. specification C-110. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A. specification C-111.
- All water hydrants and valves shall be cast iron and installed in accordance with plans and details. All water hydrants shall be American Darling or Mueller Centurians.
- All P.V.C. water pipe shall have a minimum pressure rate of FR-200 or SDR-21.
- This tract is served by WATER - ST. CHARLES CO. PUBLIC WATER SUPPLY DIST.#2 ELECTRIC - AMEREN CO. TELEPHONE - VERDON SEWERS - ST. CHARLES CO. PUBLIC WATER SUPPLY DIST.#2 GAS - LAKE ST. LOUIS FIRE PROTECTION DISTRICT SCHOOL DISTRICT - WENTZVILLE R-4

| |
|----------------|
| (636) 561-3737 |
| (800) 552-7583 |
| (636) 332-3011 |
| (636) 561-3737 |
| (314) 621-6950 |
| (636) 561-9200 |
| (636) 327-3800 |
- All erosion & sediment control facilities shall be inspected & maintained following each significant rainstorm (1/2" event).
- Each contractor, subcontractor, and/or utility company shall be responsible for the maintenance and preservation of any siltation control placed on the development by the developer and shall not disturb the siltation control except as absolutely necessary, in the event of any such disturbance of siltation control, then the contractor, subcontractor, or utility company, as applicable, disturbing such siltation control shall immediately replace the same at such contractor's, subcontractor's, and utility company's, as applicable, expense. In the event of any fines or penalties being levied as a result of the disturbance of any such siltation control, the party disturbing such siltation control shall be liable for payment of same and shall indemnify and hold developer harmless from any and all liabilities, damages, demands, all liabilities, damages, demands, penalties, fines, fees, claims, causes of action, judgements, costs and expenses, including, without limitation, attorneys' fees, arising from or in connection with any such disturbance.
- THE SEDIMENT CONTROL PLAN MUST BE IMPLEMENTED BEFORE GRADING BEGINS. NO GRADED AREA IS TO REMAIN WITHOUT AT LEAST SEVENTY-FIVE (75) PERCENT OF VEGETATIVE GROUND COVER FOR MORE THAN THIRTY (30) DAYS WITHOUT BEING SEEDED AND MULCHED OR SODDED. ALSO, POSITIVE STEPS MUST BE EXERCISED TO PREVENT TRANSPORTED SOIL FROM DAMAGING ADJACENT PROPERTY AND BEING DEPOSITED IN THE FORM OF SILT IN STORM DRAINAGE SYSTEMS WHETHER ON -SITE OR OFF-SITE.
- THE CITY ENGINEER SHALL BE CONTACTED AFTER THE INSTALLATION OF THE SILTATION CONTROL DEVICES AND AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE COMMENCEMENT OF ANY GRADING OPERATIONS.
- ANY DEPOSITING OF SILTS OR MUD ONTO NEW OR EXISTING PAVEMENT OR IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE CITY OF LAKE ST. LOUIS.
- THE DEVELOPER SHALL CAUSE THE "AS-BUILT" LOCATION OF EACH STORM-SEWER OUTFALL OF THE PROJECT TO BE DISPLAYED ON THE "AS-BUILT" PLANS WITH HORIZONTAL COORDINATES OF THE END POINT OF THE OUTFALL CLEARLY LABELED AND REFERENCED TO THE MISSOURI COORDINATE SYSTEM OF 1983 AS DEFINED BY R.S. MO 60.401 AND SHALL DISPLAY THE PROJECT GRID FACTOR. IN ADDITION, THE VERTICAL ELEVATION OF EACH OUTFALL SHALL BE LABELED ON THE "AS-BUILT" PLANS AND SHALL BE REFERENCED TO THE PROJECT'S VERTICAL DATUM. ONE MYLAR SET, TWO PAPER SETS, AND ONE DIGITAL COPY IN AUTOCAD FORMAT OF THE "AS-BUILT" PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER BEFORE THE CITY SHALL RELEASE THE ESCROW ESTABLISHED INSURING OR GUARANTEEING THE STABILIZATION AND REVEGETATION OF THE SITE.
- ALL P.V.C. SANITARY SEWER PIPE SHALL BE SDR-35 OR EQUAL WITH CRUSHED STONE BEDDING UNIFORMLY GRADED BETWEEN 1" & 1/4" SIZE. THIS BEDDING SHALL EXTEND FROM 8" BELOW THE PIPE TO 7/10 OF THE PIPE DIAMETER ABOVE THE BOTTOM OF THE PIPE.
- EXISTING ZONING - SR-1.
- THE PUMPS AND CONTROL PANEL OF THE TEMPORARY LIFT STATION SHALL BECOME THE PUBLIC WATER SUPPLY DISTRICT #2 OF ST. CHARLES COUNTY'S PROPERTY WHEN INSTALLED AND ACCEPTED AND SHALL REMAIN P.W.S.D.#2 PROPERTY AFTER REMOVAL.
- WHEN THE TEMPORARY LIFT STATION IS TAKEN OUT OF SERVICE, THE PUMPS AND CONTROL PANEL SHALL BE REMOVED AND DELIVERED TO THE P.W.S.D.#2 FACILITIES, AND ALL MANHOLES SHALL BE MODIFIED TO FUNCTION AS ORIGINALLY PROPOSED. THE ROAD, THE BARRIER AND THE FENCE SHALL BE REMOVED AND DISPOSED OF AND THE AREA SHALL BE RESTORED TO MATCH THE ADJACENT LAWN AREAS AND ALL AREAS SHALL BE GRADED TO PROPERLY DRAIN. ALL OF THE WORK TO BE DONE AS STATED ABOVE SHALL BE PERFORMED BY DEVELOPER'S CONTRACTOR AT NO EXPENSE TO THE P.W.S.D.#2 AND TO THE P.W.S.D.#2'S SATISFACTION.



LOCATION MAP

DRAWING INDEX

| Sheet | Description |
|-------|----------------------|
| 1 | COVER SHEET |
| 2 | SITE PLAN |
| 3 | CONSTRUCTION DETAILS |

LEGEND

| | | | |
|----------------------------|----------------------------|----------|---------------------------|
| Sanitary Sewer (Proposed) | Sanitary Structure | R.C.P. | Reinforced Concrete Pipe |
| Sanitary Sewer (Existing) | Storm Structure | C.M.P. | Corrugated Metal Pipe |
| Storm Sewer (Proposed) | Test Hole | C.I.P. | Cast Iron Pipe |
| Storm Sewer (Existing) | Power Pole | P.V.C. | Polyvinyl Chloride |
| Water Line & Size | Light Standard | V.C.P. | Vitrified Clay Pipe |
| Existing water line | Double Water Meter Setting | C.I. | Curb Inlet |
| Tea & Valve | Single Water Meter Setting | C.O. | Clean Out |
| Hydrant | Gas Meter | V.T. | Vent Trap |
| Cap | S.C.I. | S.K.I. | Skewed Curb Inlet |
| 18. Lot or Building Number | D.C.I. | T.B.R.&R | To Be Removed & Relocated |
| Existing Fence Line | G.I. | T.B.P. | To Be Protected |
| Existing Tree Line | A.I. | T.S.A. | To Be Abandoned |
| Street Sign | D.A.I. | B.C. | Base Of Curb |
| Existing Contour | C.C. | T.C. | Top Of Curb |
| Proposed Contour | F.E. | T.W. | Top Of Wall |
| Rip-Rap | E.P. | B.W. | Base Of Wall |
| End of Lateral | E.D. | (TYP) | Typical |
| Asphalt Pavement | M.H. | U.N.G. | Unless Noted Otherwise |
| Concrete Pavement | C.P. | U.I.P. | Use In Place |
| Utility Easement | OFF | | Over Land Flow Path |
| Flow Path Arrow | | | |

APPROVED FOR CONSTRUCTION AND/OR INSTALLATION BY:
W.M. - 0.5/2/04 3/9/04
ST. CHARLES COUNTY PUBLIC WATER SUPPLY DISTRICT NO. 2
SUBJECT TO MAPS 1 OR 2
SHEET 2

PROJECT BENCH MARK

BM: CHISELED CROSS (+) ON NORTHWEST WINGWALL ON U.S. HIGHWAY 40-61 BRIDGE WESTBOUND LANES OVER PERUQUE CREEK AT SOUTH END OF LAKE SAINT LOUIS.

ELEVATION = 508.91

SITE BENCH MARK

BM: CHISELED CROSS (+) ON SIDEWALK OF SOUTHEAST CORNER AT INTERSECTION OF LAKE SAINT LOUIS BOULEVARD AND FOX HOUND DRIVE.

ELEVATION = 581.24

PICKETT RAY & SILVER
333 Mid Rivers Mall Drive
St. Peters, MO 65276
Phone (636) 397-1211
Fax (636) 397-1104
LAND SURVEYORS

BRECKENRIDGE
TEMPORARY PUMP STATION
FORCE MAIN
2001
AMERICA'S BEST BUILDER
Prepared For:
TAYLOR MORLEY HOMES
17107 Chesterfield Airport Road
Second Floor
Chesterfield, Missouri 63005
(314) 434-9000

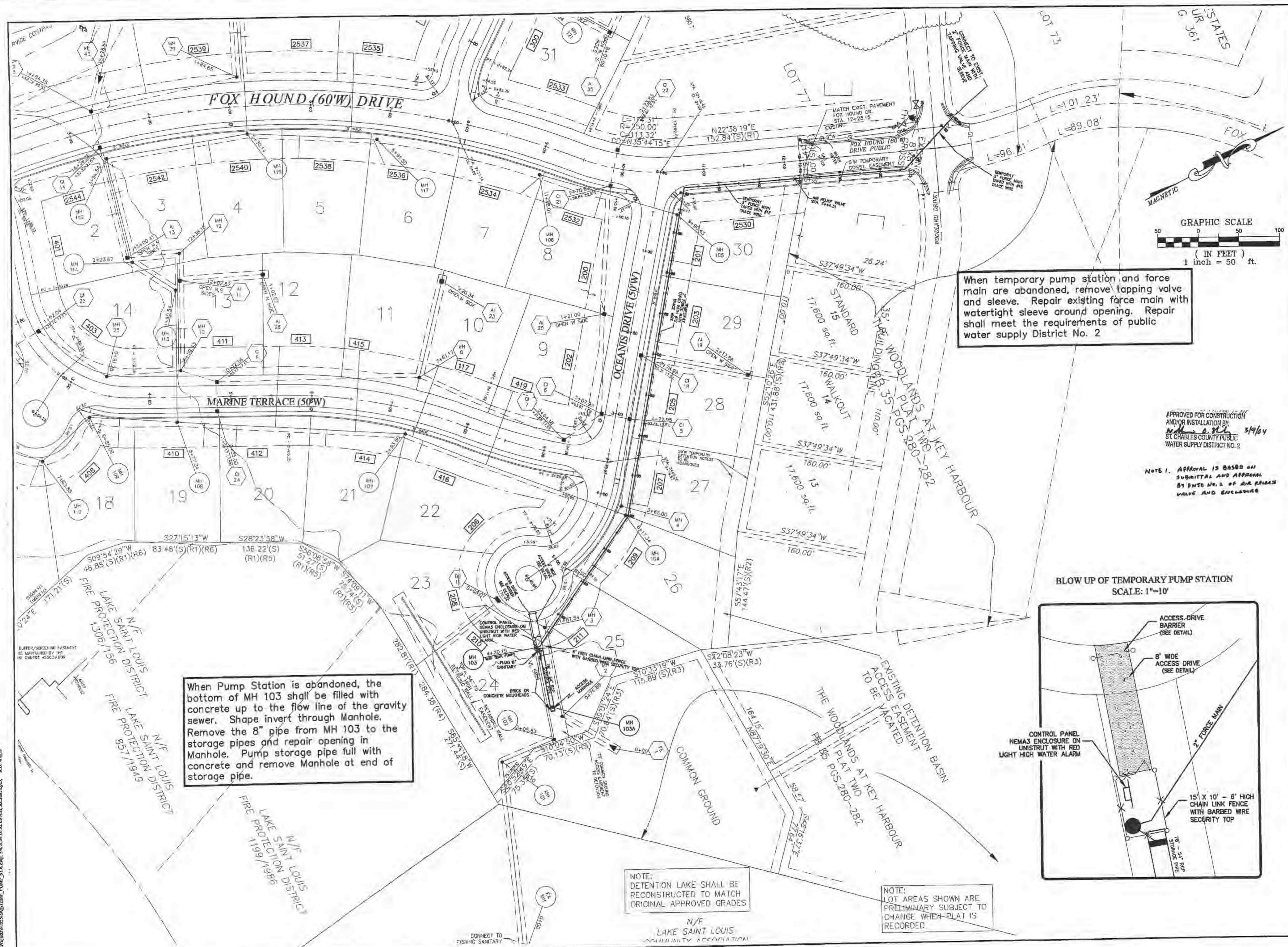
| REVISIONS | DATE | BY | PER P.W.S.D.#2 COMMENTS | RDW |
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| 1 | 03/02/04 | | | |

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after the date unless reauthenticated.
PICKETT, RAY & SILVER, INC.



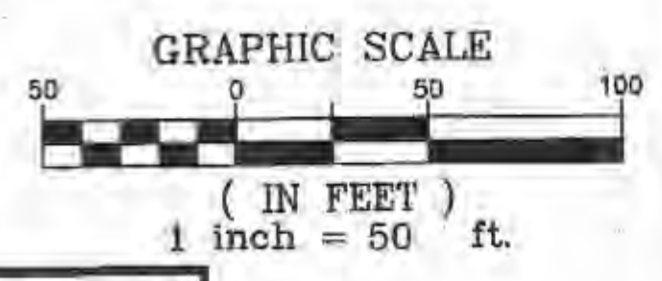
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| DRAWN | DKL | DATE | 01/26/04 |
| CHECKED | EAK | DATE | 01/26/04 |
| PROJECT # | 90055 TAMG.03R | FIELD BOOK | X |

BRECKENRIDGE
COVER
SHEET **1** OF **3**
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When temporary pump station and force main are abandoned, remove tapping valve and sleeve. Repair existing force main with watertight sleeve around opening. Repair shall meet the requirements of public water supply District No. 2

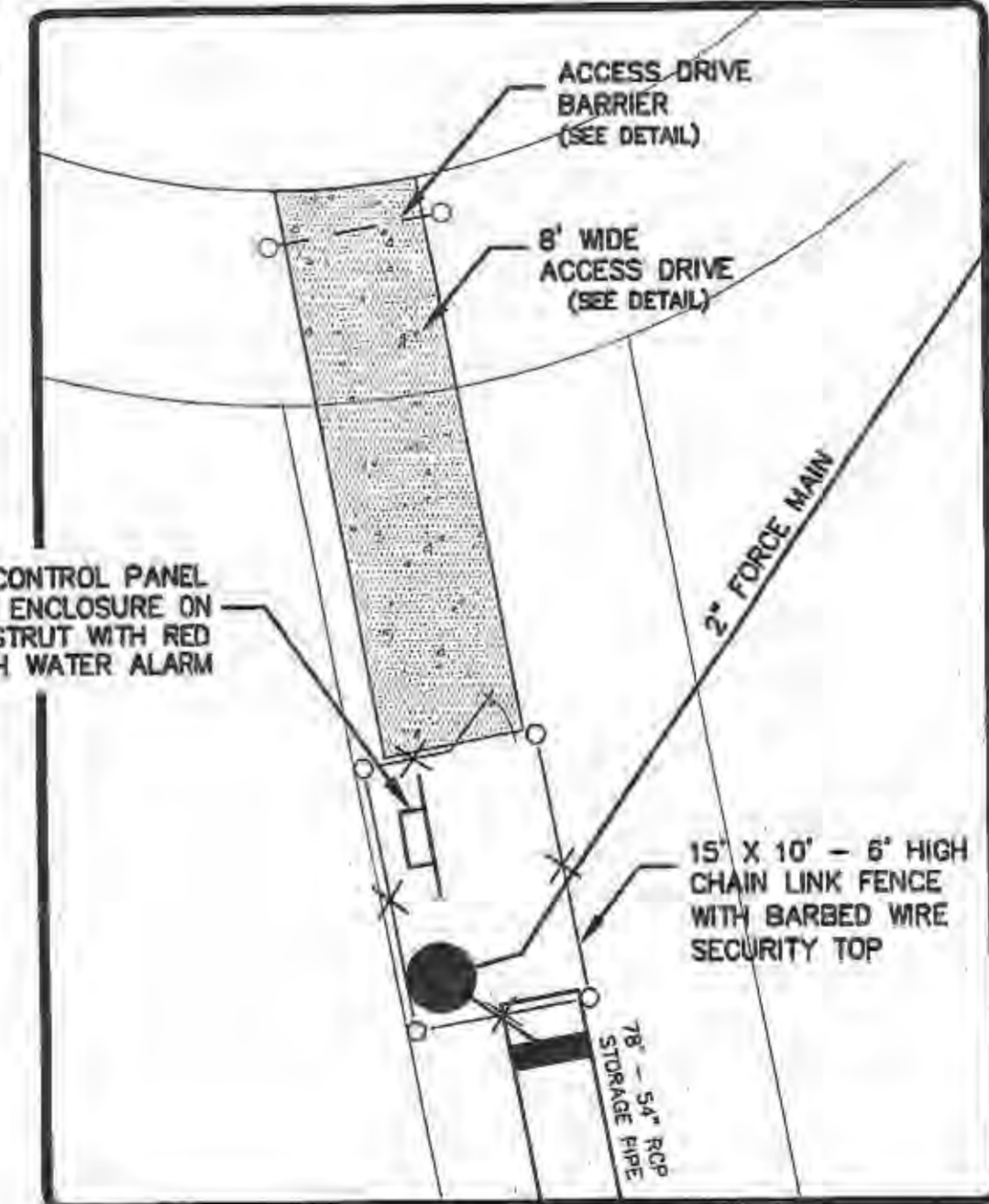
When Pump Station is abandoned, the bottom of MH 103 shall be filled with concrete up to the flow line of the gravity sewer. Shape invert through Manhole. Remove the 8" pipe from MH 103 to the storage pipes and repair opening in Manhole. Pump storage pipe full with concrete and remove Manhole at end of storage pipe.



APPROVED FOR CONSTRUCTION AND/OR INSTALLATION BY:
 [Signature] 3/19/04
 ST. CHARLES COUNTY PUBLIC WATER SUPPLY DISTRICT NO. 2

NOTE 1. APPROVAL IS BASED ON SUBMITTAL AND APPROVAL BY PDNO NO. 2 OF AIR RELEASE VALVE AND ENCLOSURE

BLOW UP OF TEMPORARY PUMP STATION SCALE: 1"=10'



NOTE: DETENTION LAKE SHALL BE RECONSTRUCTED TO MATCH ORIGINAL APPROVED GRADES

NOTE: LOT AREAS SHOWN ARE PRELIMINARY SUBJECT TO CHANGE WHEN PLAT IS RECORDED

PICKETT RAY & SILVER
 CIVIL ENGINEERS
 PLANNERS
 LAND SURVEYORS
 3833 Mid Rivers Mall Drive
 St. Peters, MO 65376
 Phone (636) 392-1211
 Fax (636) 397-1104

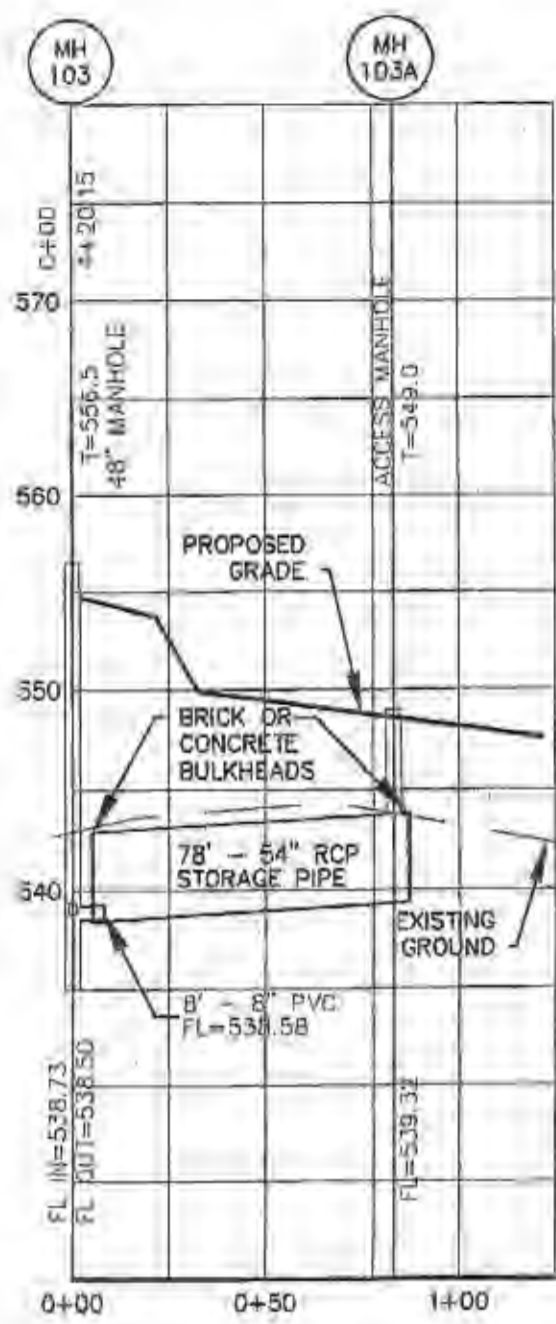
BRECKENRIDGE
 2001.4 AMERICAS BEST BUILDER
 TEMPORARY PUMP STATION FORCE MAIN
 Prepared For: TAYLOR MORLEY HOMES
 1107 Charleston Airport Road
 Charleston, Missouri 63005
 (314) 434-0900

| REVISIONS | DATE | PER. # | DESCRIPTION |
|-----------|----------|--------|--------------------------------|
| 1 | 03/23/04 | | PER P. # 52, 62 COMMENTS - REV |

ENGINEERS AUTHENTICATION
 The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
 PICKETT, RAY & SILVER, INC.
 [Professional Engineer Seal: State of Missouri, Elmer Andrew Silver, No. E-18746, Registered Professional Engineer, 3/19/04]

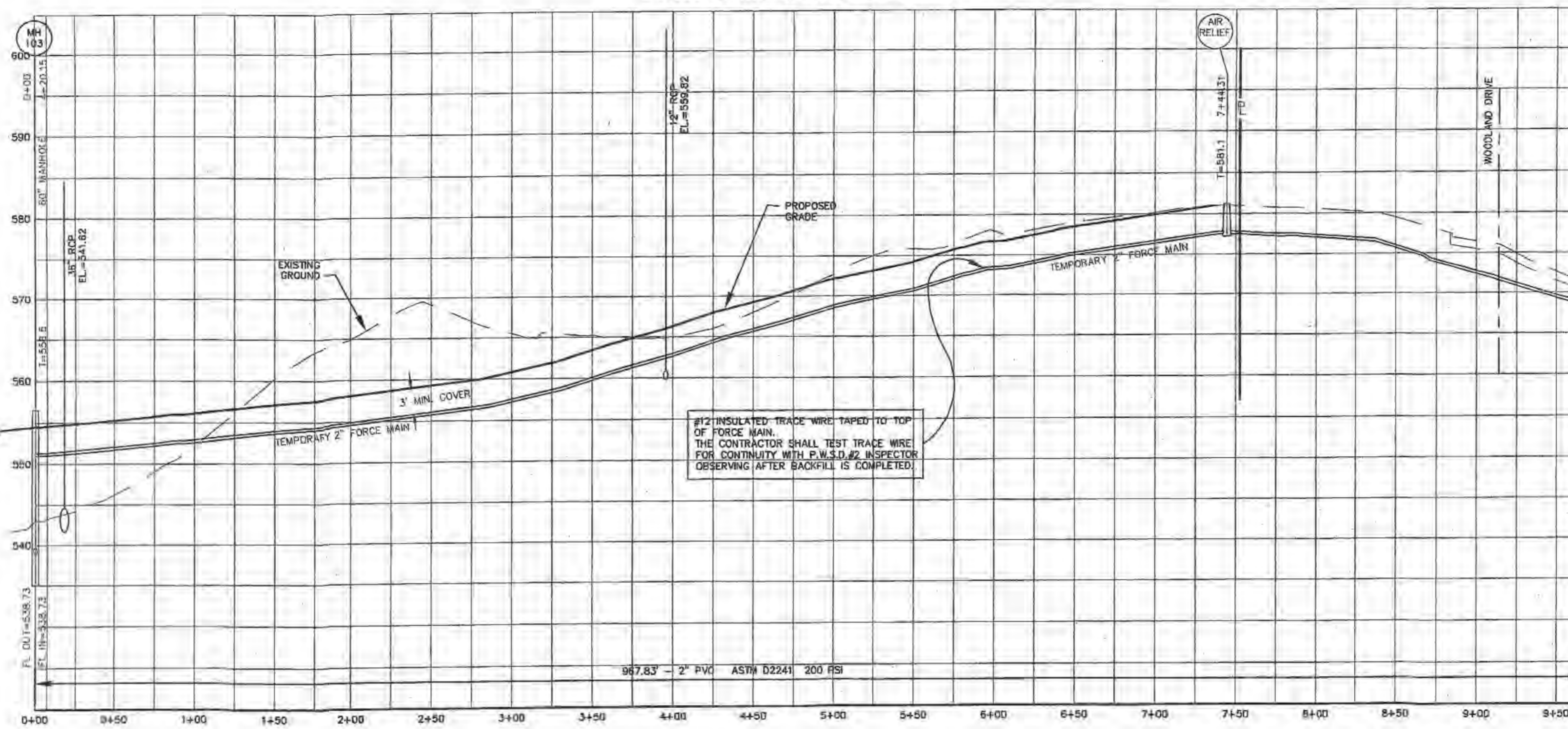
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| TASK # | 1 FIELD BOOK X |

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STORAGE PIPE PROFILE

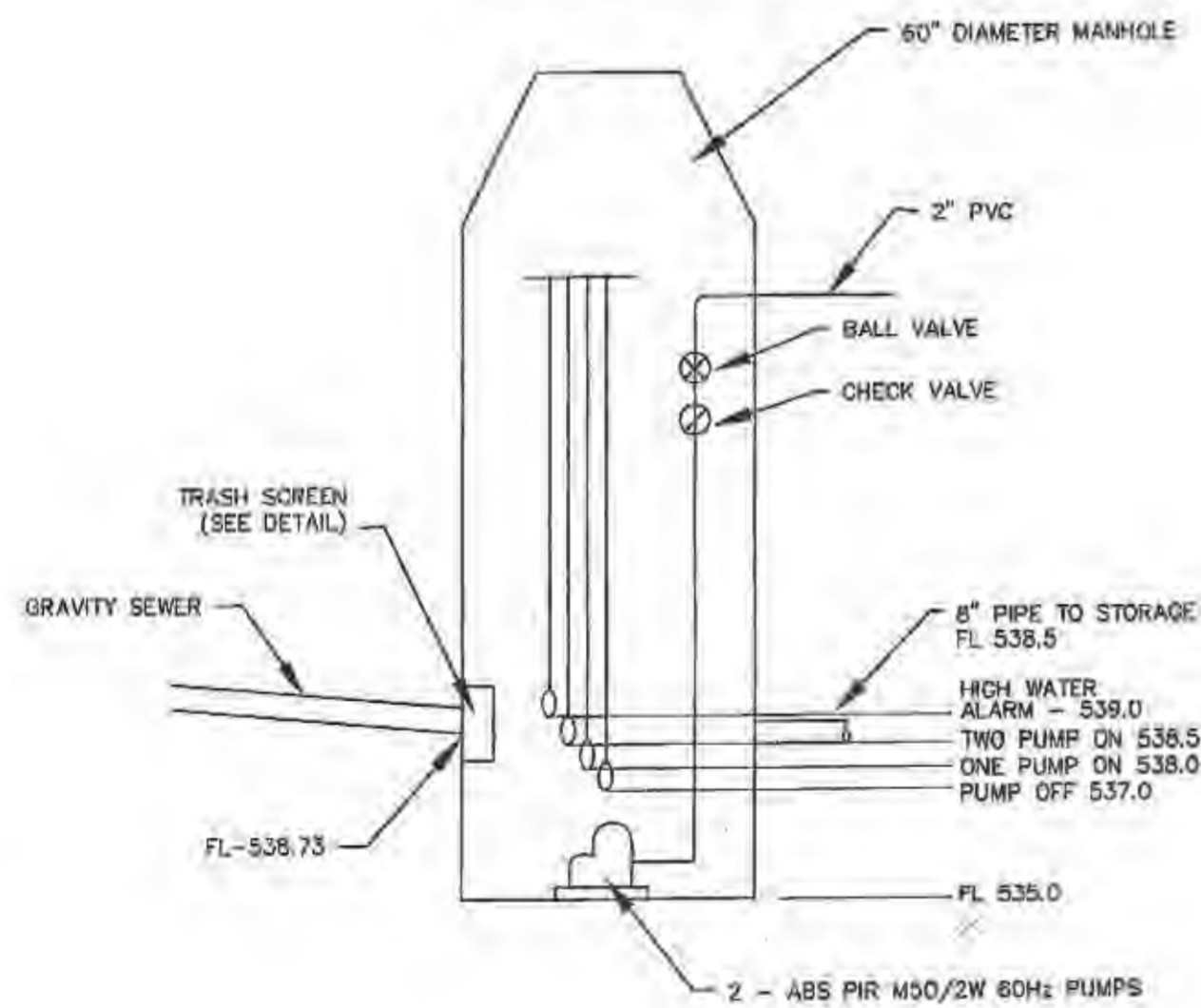
FORCE MAIN PROFILE



SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=10'

APPROVED FOR CONSTRUCTION AND/OR INSTALLATION BY: *W.H. O'Sullivan* 3/17/04
ST. CHARLES COUNTY PUBLIC WATER SUPPLY DISTRICT NO. 2
SUBJECT TO NOTE 1 ON SHEET 2

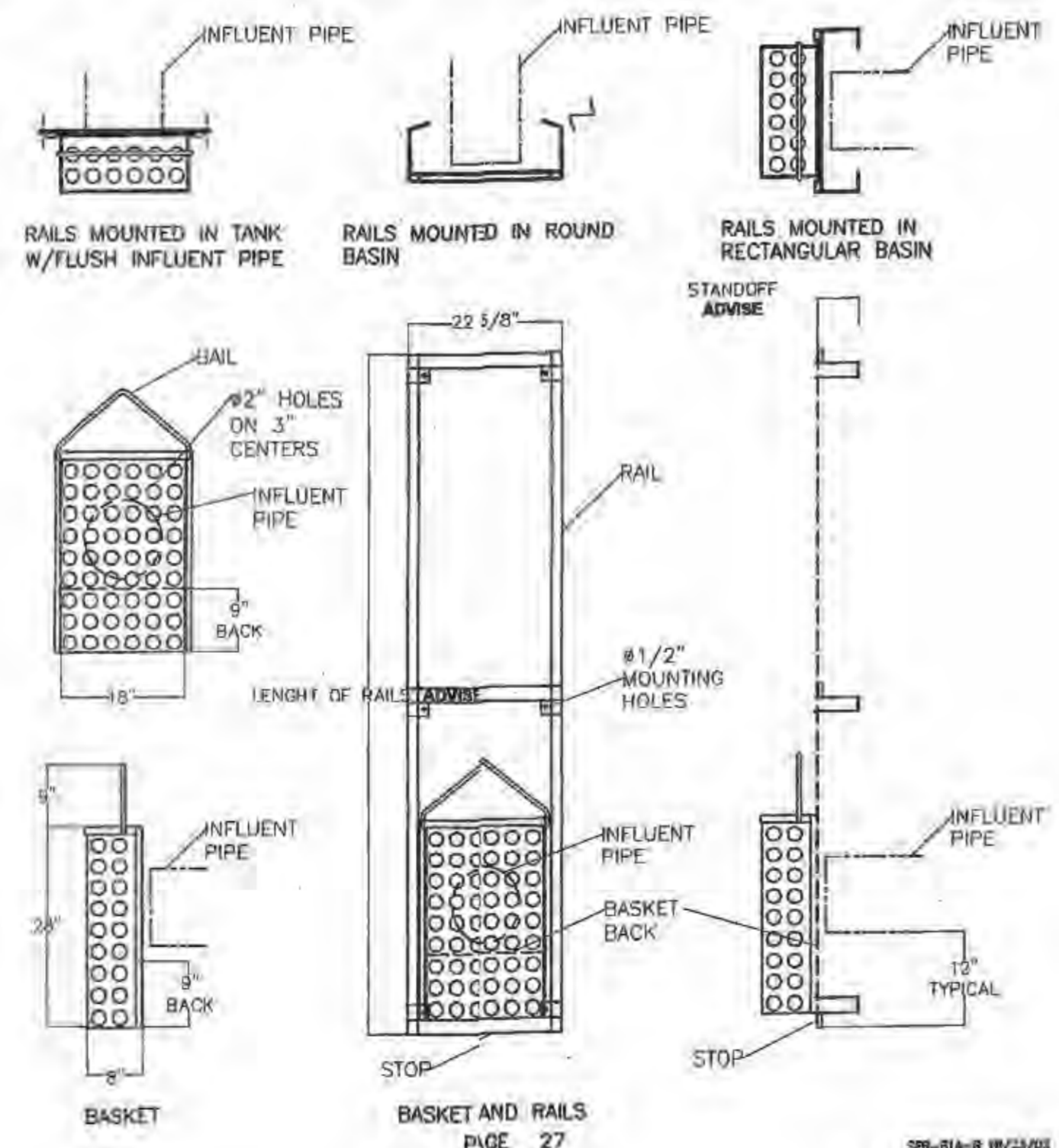
MANHOLE 103



SERIES B1A TRASH BASKET

- STANDARD FEATURES:
- ALL ALUMINUM CONSTRUCTION
 - PERFORATED SCREENING STYLE
 - EXTRUDED ALUMINUM GUIDERAIL SYSTEM
 - STAINLESS STEEL PIPE RAIL SYSTEM AVAILABLE

REQUIRED INFORMATION: BASIN DIAMETER, RAIL LENGTH, LENGTH OF STANDOFF (IF REQUIRED)



NOTES

ENTRANCE ROAD BARRIER - The entrance road shall have a 36-inch high barrier posts installed at the road entrance. Post shall be constructed of 6\"/>

FENCING - Fencing shall be required around the pump station and control panel.

A Fencing Specifications

Wire fabric for the fence shall be galvanized 6\"/>

All posts and other appurtenances used in the construction of the fence shall be galvanized schedule 40 pipe. All posts shall be equipped with tops. Fiberglass or other material fencing components will not be acceptable.

A 12'-wide entrance gate will be provided for access to the station grounds.

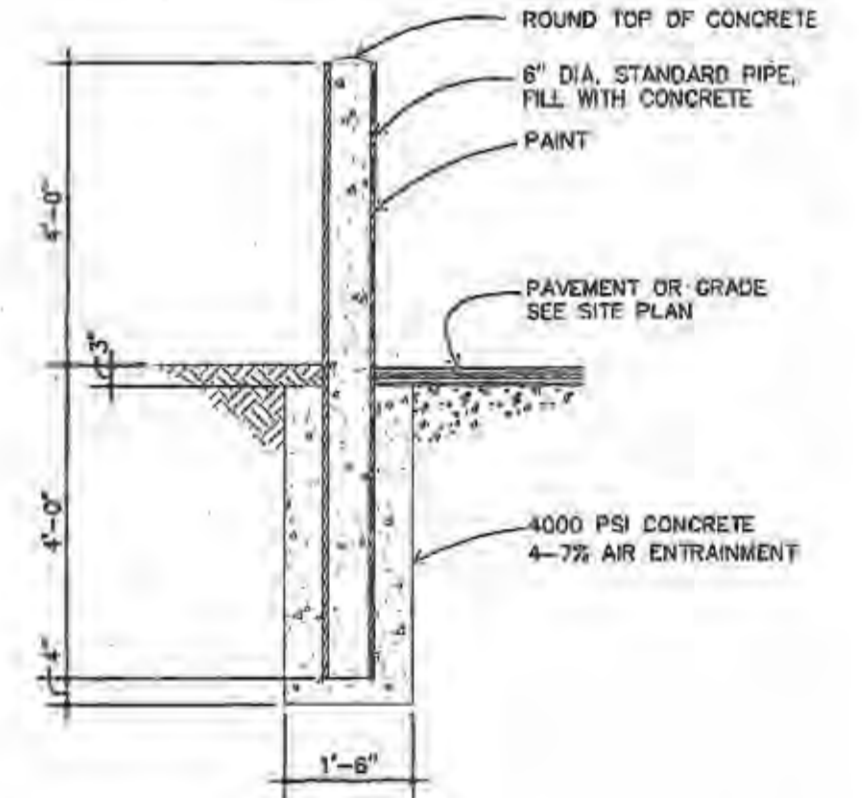
Posts shall be sized and set as follows:

| TYPE | SIZE | PULL |
|-------------------------|-----------------------------|---------------|
| Top Rails & Brace | 1-1/4" Nominal (1.66" O.D.) | 2.27 lbs./ft. |
| Line Post & Gate Frame | 1-1/2" Nominal (1.9" O.D.) | 2.72 lbs./ft. |
| End Corner or Pull Post | 2" Nominal (2.375 O.D.) | 5.79 lbs./ft. |
| Gate Post | 3-1/2" Nominal (4" O.D.) | 9.11 lbs./ft. |

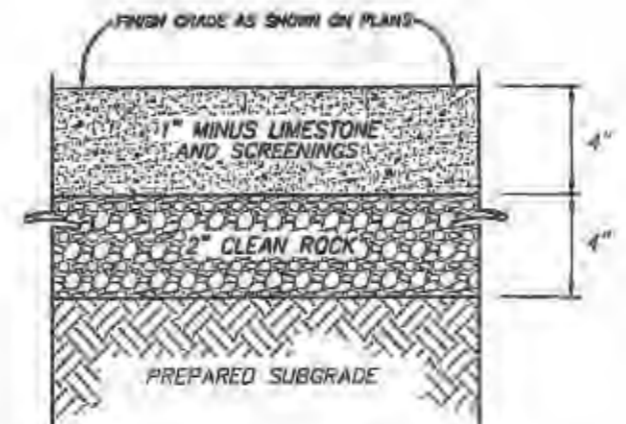
Posts shall be set in the concrete bases so that the pole bottom rests 6\"/>

Horizontal support bars shall be installed halfway between the top rail and the ground.

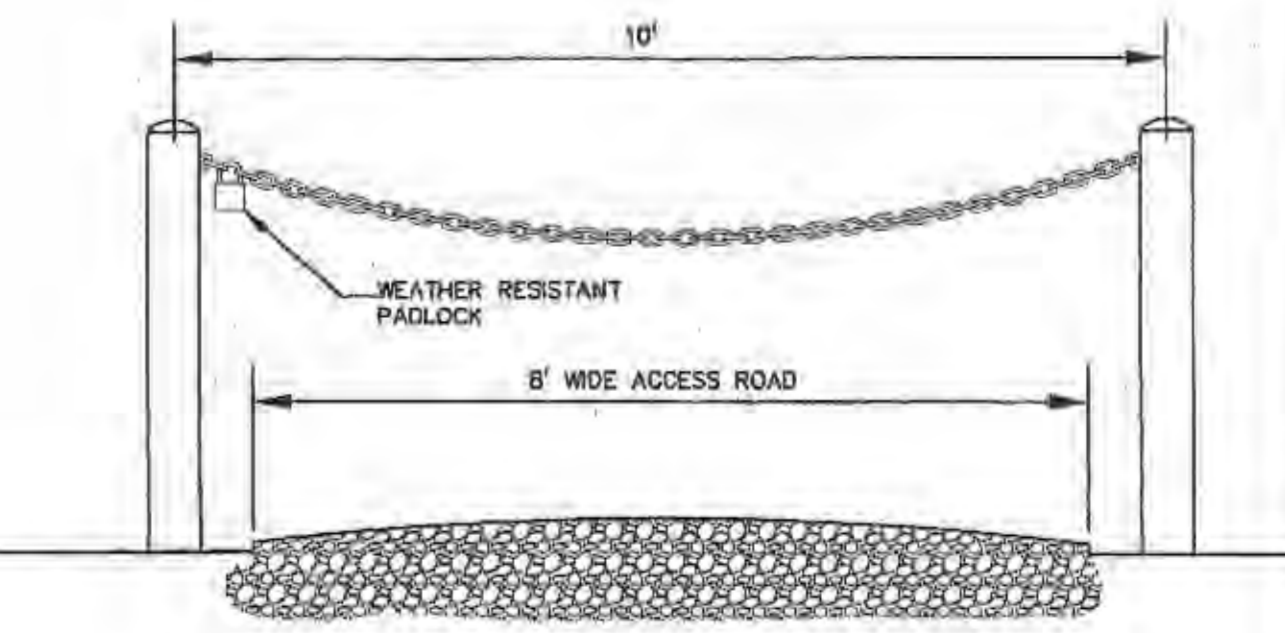
A #7 tension wire shall be installed at the bottom of the fencing fabric and stretched tight enough so as to not allow the bottom of the fencing fabric to be lifted away from the fencing poles and/or ground.



PIPE BOLLARD DETAIL NOT TO SCALE



TEMPORARY LIFT STATION ACCESS ROAD SECTION N.T.S.



NOTE: A SUITABLE PADLOCK ARRANGEMENT SHALL BE PROVIDED TO ALLOW REMOVAL OF THE CHAIN BY DISTRICT PERSONNEL FOR MAINTENANCE. THE DISTRICT SHALL BE PROVIDED WITH TWO (2) KEYS FOR THE LOCK.

TEMPORARY LIFT STATION ACCESS ROAD N.T.S.

PICKETT RAY & SILVER
CIVIL ENGINEERS
PLANNERS
LAND SURVEYORS
333 Mid Rivers Mall Drive
St. Peters, MO 63376
Phone (636) 397-1211
Fax (636) 397-1104

BRECKENRIDGE
TEMPORARY PUMP STATION
DETAILS
2001 AMERICAS BEST BUILDER
Prepared For: TAYLOR MORLEY HOMES
1707 Chatterfield Airport Road
Second Floor, Missouri 63003
(314) 954-3000

| REVISION NO. | DATE | PER P.W.S.D. COMMENTS - ROW |
|--------------|----------|-----------------------------|
| 1 | 02/05/04 | |

ENGINEERS AUTHENTICATION
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PICKETT RAY & SILVER, INC.
STATE OF MISSOURI
EXAMER AND/OR REGISTERED PROFESSIONAL ENGINEER
NUMBER: E-16146
3/1/04

| | |
|-------------------------|--------------|
| DRAWN | DATE |
| DKL | 01/23/04 |
| CHECKED | DATE |
| EAK | 01/23/04 |
| PROJECT # 900551AM0.D3R | |
| TASK # 1 | FIELD BOOK X |

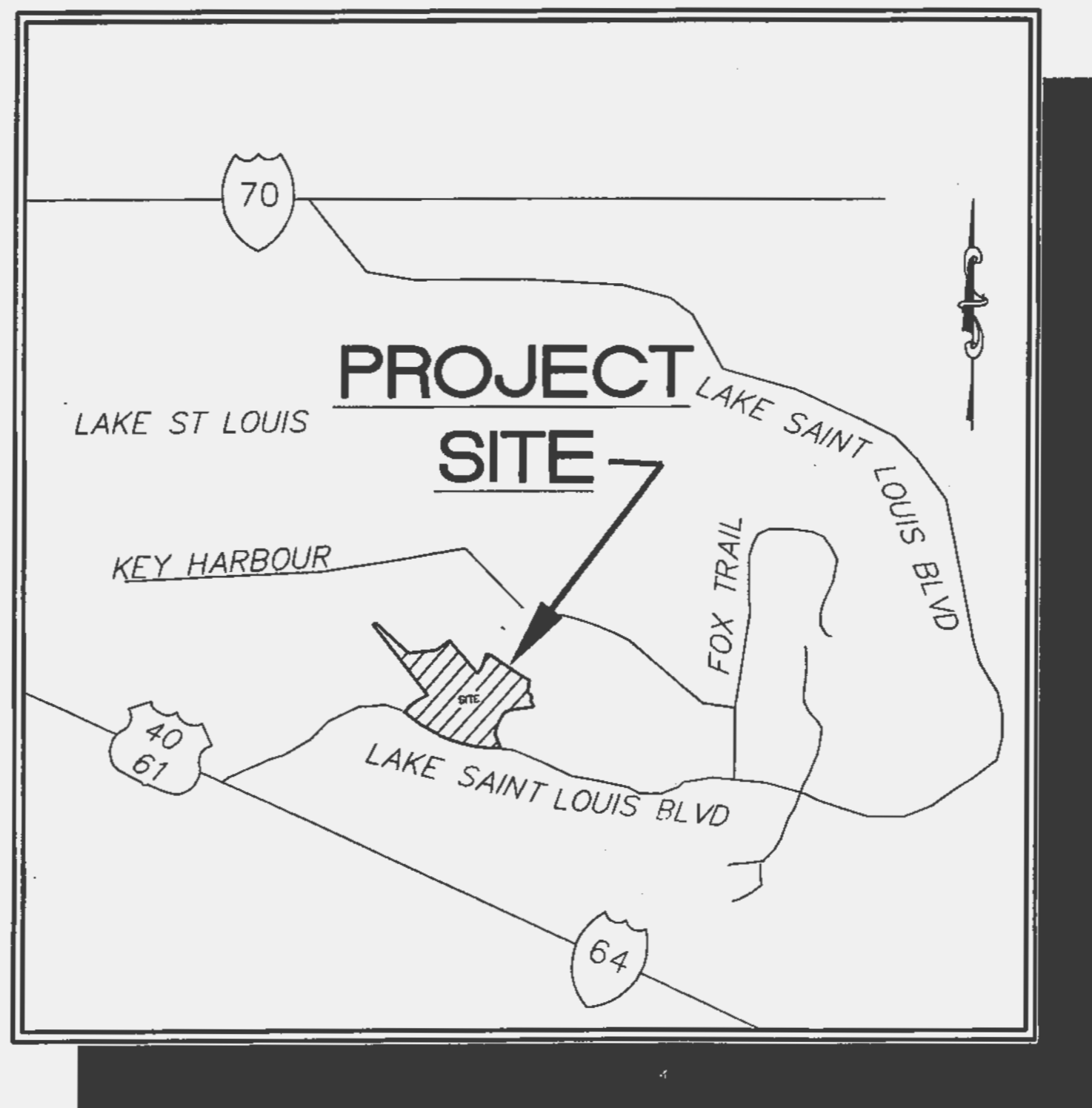
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- Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and roads will be adequately protected.
- The total yardage for this project is based on a 15.0%+ shrinkage factor.
- The shrinkage factor is subject to change, due to soil conditions, (types and moisture content), weather conditions, and the percent compaction actually achieved at the time year grading is performed. As a result, adjustments in final grade may be required. If adjustments need to be made, the contractor shall contact the project engineer, prior to completion of the grading.
- If straw bales or siltation fence are destroyed by heavy rains, vandalism, etc., they are to be replaced promptly by Contractor.
- All fills under and within 15 feet of the building areas that are deeper than 8 feet shall be compacted to at least 92 percent of the maximum dry density as determined by a modified proctor test. Fills less than 8 feet in building areas should be compacted to at least 90 percent of the maximum dry density as determined by a modified proctor test.
- All utilities shall be placed underground.
- Proposed construction schedule (rough dates):

| | | |
|-----------|------------|---|
| 9-15-2003 | 9-16-2003 | a. Clearing (estimated duration of exposed area). |
| 9-17-2003 | 10-3-2003 | b. Grading and construction (installation of temporary sediment control, storm drainage). |
| 10-6-2003 | 10-12-2003 | c. Final Grading and Landscaping (vegetative cover). |
- Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible or during the next seeding period after grading has been completed.
- When grading operations are completed or suspended for more than 30 days, permanent grass must be established at sufficient density to provide erosion control from the site. Between permanent grass seeding periods, temporary cover shall be provided according to the designated officials recommendation.
- (Areas not to be disturbed by future improvement) in bed at the rate of 100 pounds per 1,000 square feet when seeded.
- Trees, organic debris, rubble, foundations and other deleterious material shall be removed from the site and disposed in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district.
- The developer and his contractor shall be responsible for installing the siltation control as approved by the City of Lake St. Louis prior to the commencement of grading operations.
- According to the F.I.R.M. map #2918300220 E dated August 2, 1996, this tract is outside the limits of the 100 year flood plain.
- Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR-35.
- All exterior sewer manholes shall be waterproofed on the exterior in accordance with Missouri Department of Natural Resources specifications. 10 CSR 8.120 (7)(E).
- Brick shall not be used on manholes.
- The minimum vertical distance from the low point of the building to the flowline of a sanitary sewer at the corresponding building connection shall not be less than the diameter of the sanitary sewer plus a vertical distance not less than two and one-half feet (2-1/2').
- Straw bales and/or silt fences will be installed, as necessary, in fill conditions, to prevent any erosion, silt, or sediment, from escaping grading site.
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M36, A.A.S.H.T.O. See plans for gauge.
- All storm sewer pipe under pavement, regardless of size shall be reinforced concrete pipe (A.S.T.M. C-76, Class III) unless noted otherwise on the plans.
- All manhole and catch basin tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stake-out of the sewer lines, oil curb and grate inlets will be face staked. If normal face stakes fall in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve oil face stakes from destruction.
- All standard street curb inlets to have front of inlet 2 1/2 feet behind back of curb.
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- All storm and sanitary sewer trench backfills will be water jetted. Granular backfill will be used under pavement areas. This is to be done in the presence of a City representative. Water jetting shall be at 100% complete and approved prior to paving. Seven days shall pass for setting time prior to paving.
- Barricades will consist of three 18" x 18" Type IV object markers with 9 Red Button Reflectors on red background mounted on two pound "U" channel sign post, with bottom of the marker 4 feet above top of pavement. (Sign No. OM4).
- Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority. There shall be a minimum of 18" vertical/10" horizontal separation between all water mains and sanitary services.
- All ductile iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast iron fittings shall conform to A.W.W.A. specification C-110. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A. specification C-111.
- All water hydrants and valves shall be cast iron and installed in accordance with plans and details. All water hydrants shall be American Daring or Mueller Centurions.
- All P.V.C. water pipe shall have a minimum pressure rate of PR-200 or SDR-21.
- This tract is served by:
WATER - ST. CHARLES CO. PUBLIC WATER SUPPLY DIST.#2
ELECTRIC - AMEREN UE
TELEPHONE - VERIZON
SEWERS - ST. CHARLES CO. PUBLIC WATER SUPPLY DIST.#2
GAS - LACLEDE GAS COMPANY
FIRE PROTECTION - LAKE ST. LOUIS FIRE PROTECTION DISTRICT SCHOOL DISTRICT - WENTZVILLE R-4
(836) 561-3737
(800) 532-7583
(836) 332-3011
(836) 561-3737
(314) 621-6960
(836) 561-9200
(836) 327-3800
- All erosion & sediment control facilities shall be inspected & maintained following each significant rainstorm (1/2" event).
- Each contractor, subcontractor, and/or utility company shall be responsible for the maintenance and preservation of any siltation control placed on the development by the developer and shall not disturb the siltation control except as absolutely necessary, in the event of any such disturbance of siltation control, then the contractor, subcontractor, or utility company, as applicable, disturbing such siltation control shall immediately replace the same at such contractor's, subcontractor's, and utility company's, as applicable, expense. In the event of any lines or penalties being levied as a result of the disturbance of any such siltation control, the party disturbing such siltation control shall be liable for payment of same and shall indemnify and hold developer harmless from any and all liabilities, damages, demands, all liabilities, damages, demands, penalties, fines, fees, claims, causes of action, judgments, costs and expenses, including, without limitation, attorneys' fees, arising from or in connection with any such disturbance.
- THE SEDIMENT CONTROL PLAN MUST BE IMPLEMENTED BEFORE GRADING BEGINS. NO GRADED AREA IS TO REMAIN WITHOUT AT LEAST SEVENTY-FIVE (75) PERCENT OF VEGETATIVE GROUND COVER FOR MORE THAN THIRTY (30) DAYS WITHOUT BEING SEEDED AND MULCHED OR SODDED. ALSO, POSITIVE STEPS MUST BE EXERCISED TO PREVENT TRANSPORTED SOIL FROM DAMAGING ADJACENT PROPERTY AND BEING DEPOSITED IN THE FORM OF SILT IN STORM DRAINAGE SYSTEMS WHETHER ON-SITE OR OFF-SITE.
- THE CITY ENGINEER SHALL BE CONTACTED AFTER THE INSTALLATION OF THE SILTATION CONTROL DEVICES AND AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE COMMENCEMENT OF ANY GRADING OPERATIONS.
- ANY DEPOSITING OF SILTS OR MUD ONTO NEW OR EXISTING PAVEMENT OR IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE CITY OF LAKE ST. LOUIS.
- THE DEVELOPER SHALL CAUSE THE "AS-BUILT" LOCATION OF EACH STORM-SEWER OUTFALL OF THE PROJECT TO BE DISPLAYED ON THE "AS-BUILT" PLANS WITH HORIZONTAL COORDINATES OF THE END POINT OF THE OUTFALL CLEARLY LABELED AND REFERENCED TO THE MISSOURI COORDINATE SYSTEM OF 1983 AS DEFINED BY R.S. MO 60.401 AND SHALL DISPLAY THE PROJECT GRID FACTOR. IN ADDITION, THE VERTICAL ELEVATION OF EACH OUTFALL SHALL BE LABELED ON THE "AS-BUILT" PLANS AND SHALL BE REFERENCED TO THE PROJECT'S VERTICAL DATUM. ONE MYLAR SET, TWO PAPER SETS, AND ONE DIGITAL COPY IN AUTOCAD FORMAT OF THE "AS-BUILT" PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER BEFORE THE CITY SHALL RELEASE THE ESCROW ESTABLISHED INSURING OR GUARANTEEING THE STABILIZATION AND REVEGETATION OF THE SITE.
- ALL P.V.C. SANITARY SEWER PIPE SHALL BE SDR-35 OR EQUAL WITH CRUSHED STONE BEDDING UNIFORMLY GRADED BETWEEN 1" & 1/4" SIZE. THIS BEDDING SHALL EXTEND FROM 6" BELOW THE PIPE TO 7/10 OF THE PIPE DIAMETER ABOVE THE BOTTOM OF THE PIPE.
- EXISTING ZONING - SR-1.



LOCATION MAP

DRAWING INDEX

| Sheet | Description |
|-------|----------------------|
| 1 | COVER SHEET |
| 2 | SITE PLAN |
| 3 | CONSTRUCTION DETAILS |

LEGEND

| | | |
|-------------------------------|------------------------------|------------------------------------|
| —●— Sanitary Sewer (Proposed) | MH 20 Sanitary Structure | R.C.P. Reinforced Concrete Pipe |
| —○— Sanitary Sewer (Existing) | CS Storm Structure | C.M.P. Corrugated Metal Pipe |
| --- Storm Sewer (Proposed) | ⊕ Test Hole | C.I.P. Cast Iron Pipe |
| --- Storm Sewer (Existing) | ⊙ Power Pole | P.V.C. Polyvinyl Chloride |
| —8" Water Line & Size | ⊙ Light Standard | V.C.P. Vitrified Clay Pipe |
| —EX W— Existing water line | ⊙ Double Water Meter Setting | C.I. Curb Inlet |
| ⊕ Tee & Valve | ⊙ Single Water Meter Setting | C.O. Clean Out |
| ⊕ Hydrant | ⊕ Gas Meter | V.T. Vent Trap |
| — Cap | S.C.I. Skewed Curb Inlet | T.B.R. To Be Removed |
| 18 Lot or Building Number | D.C.I. Double Curb Inlet | T.B.R.&R To Be Removed & Relocated |
| — x — Existing Fence Line | G.I. Grate Inlet | T.B.P. To Be Protected |
| Existing Tree Line | A.I. Area Inlet | T.B.A. To Be Abandoned |
| Street Sign | D.A.I. Double Area Inlet | B.C. Base Of Curb |
| Existing Contour | C.C. Concrete Collar | T.C. Top Of Curb |
| Proposed Contour | F.E. Flored End Section | T.W. Top Of Wall |
| Rip-Rap | E.P. End Pipe | B.W. Base Of Wall |
| End of Lateral | E.D. Energy Dissipater | (TYP) Typical |
| Asphalt Pavement | M.H. Manhole | U.N.O. Unless Noted Otherwise |
| Concrete Pavement | C.P. Concrete Pipe | U.I.P. Use in Place |
| Utility Easement | OFF Over Land Flow Path | |
| Flow Path Arrow | | |

PROJECT BENCH MARK

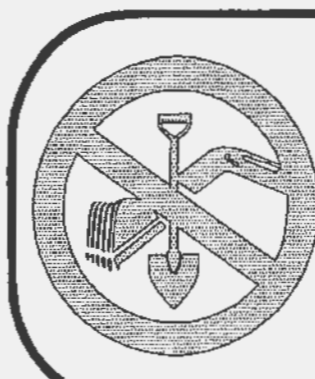
BM: CHISELED CROSS (+) ON NORTHWEST WINGWALL ON U.S. HIGHWAY 40-61 BRIDGE WESTBOUND LANES OVER PERUQUE CREEK AT SOUTH END OF LAKE SAINT LOUIS.

ELEVATION = 508.91

SITE BENCH MARK

BM: CHISELED CROSS (+) ON SIDEWALK OF SOUTHEAST CORNER AT INTERSECTION OF LAKE SAINT LOUIS BOULEVARD AND FOX HOUND DRIVE.

ELEVATION = 581.24



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Fax (636) 397-1104

LAND SURVEYORS

BRECKENRIDGE
TEMPORARY PUMP STATION
FORCE MAIN

2001 AMERICAS BEST BUILDER

TAYLOR MORLEY
H.O.M.E.S.

REVISIONS

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.

PICKETT, RAY & SILVER, INC.
STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEER
ELMER ANDERSON
NUMBER: E-16148
DATE: 12/16/04

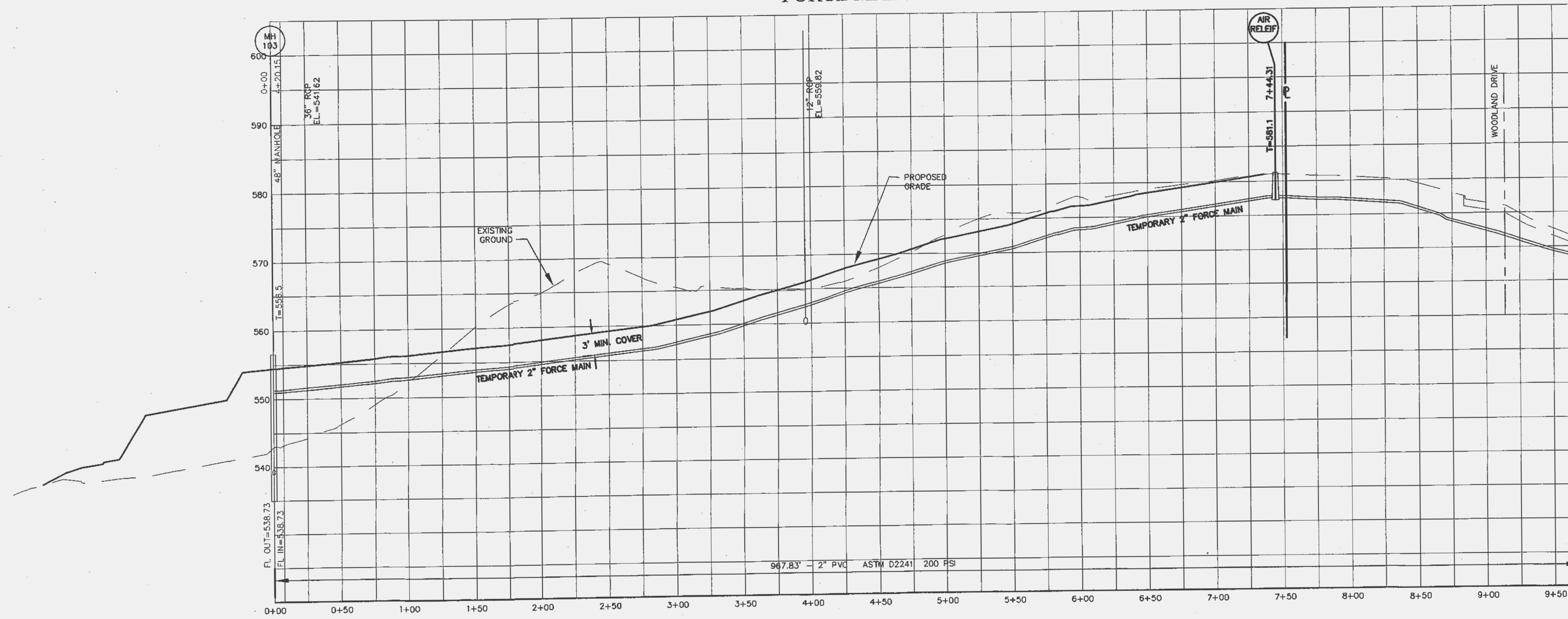
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| DRAWN | DKL | DATE | 01/26/04 |
| CHECKED | EAK | DATE | 01/26/04 |
| PROJECT # 90055TAMO.03R | | | |
| TASK # | 1 | FIELD BOOK | X |

BRECKENRIDGE COVER

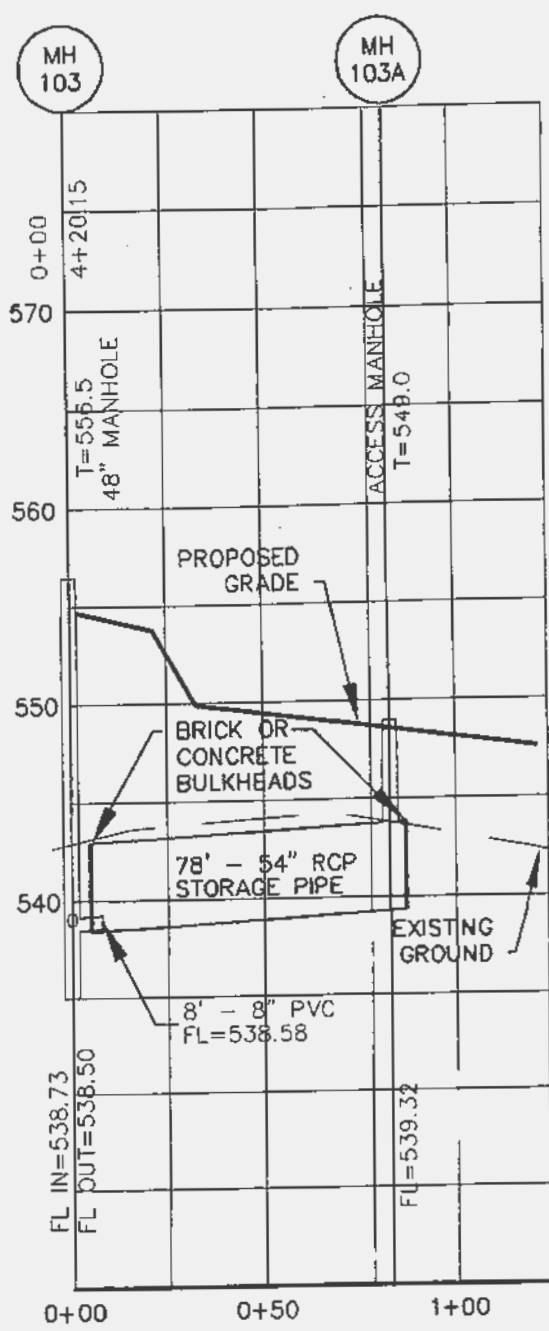
SHEET 1 OF 23

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FORCE MAIN PROFILE

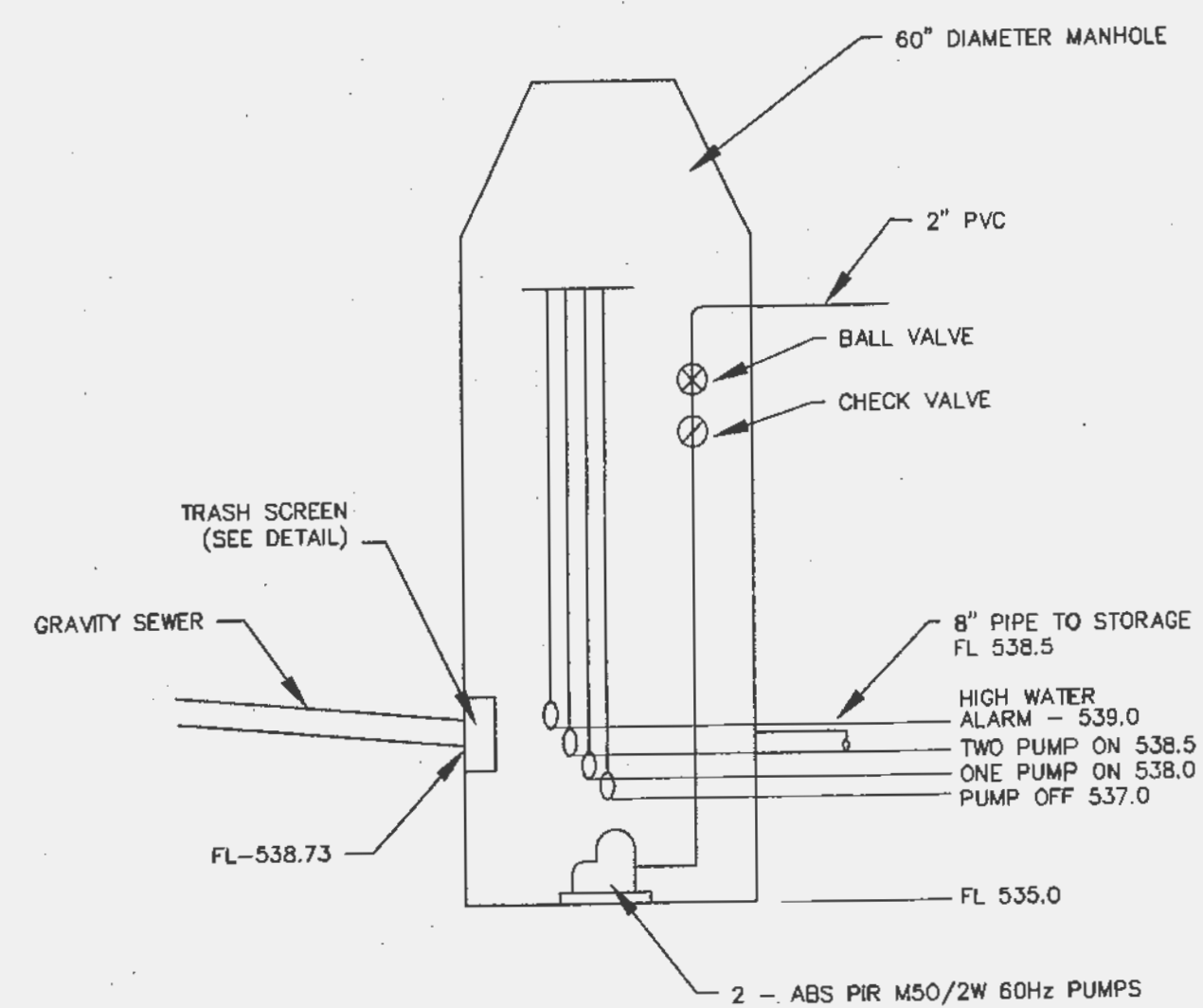


SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=10'



STORAGE PIPE PROFILE

MANHOLE 103

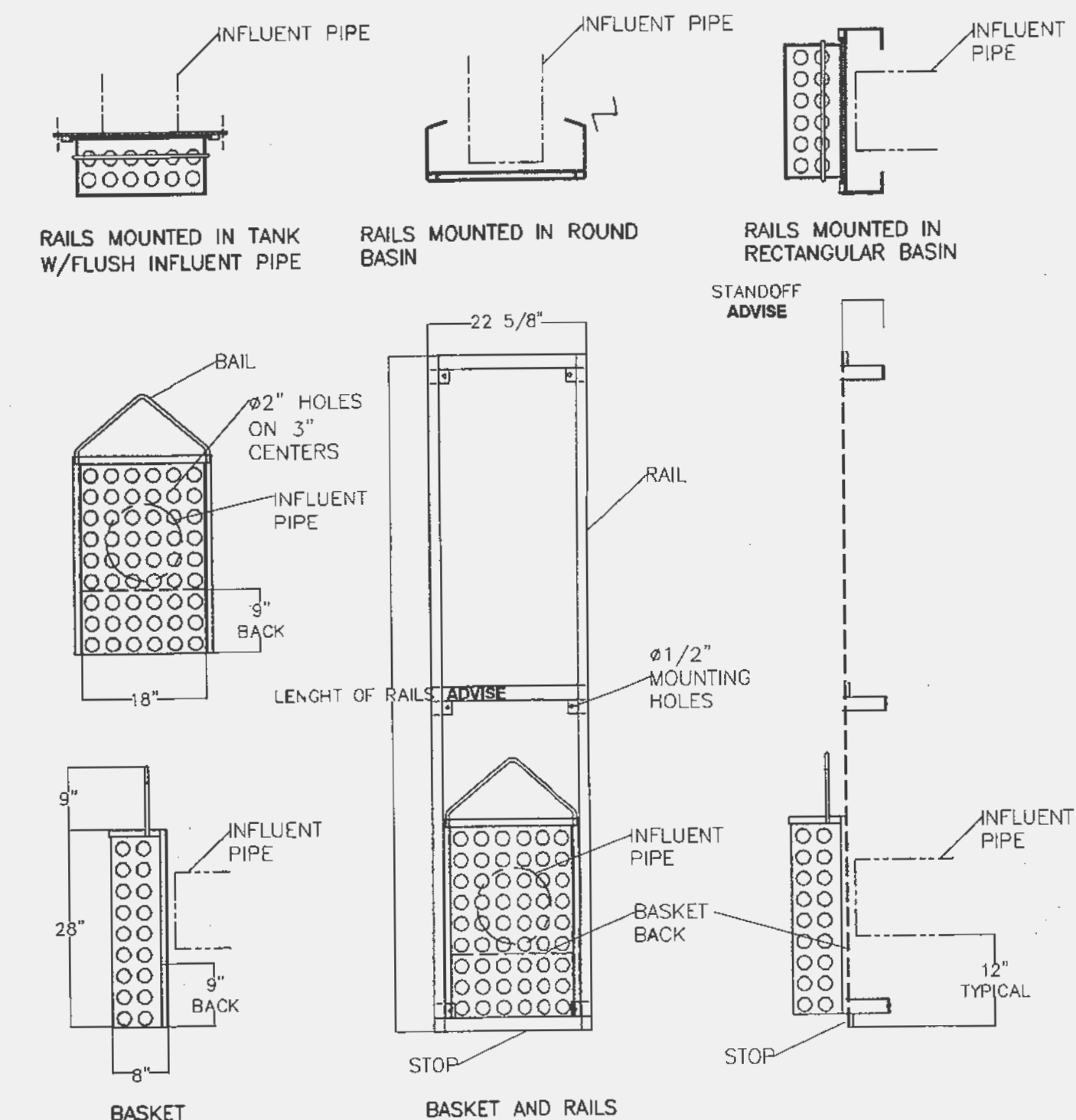


SERIES B1A TRASH BASKET

STANDARD FEATURES:

- ALL ALUMINUM CONSTRUCTION
- PERFORATED SCREENING STYLE
- EXTRUDED ALUMINUM GUIDERAIL SYSTEM
- STAINLESS STEEL PIPE RAIL SYSTEM AVAILABLE

REQUIRED INFORMATION: BASIN DIAMETER, RAIL LENGTH, LENGTH OF STANDOFF (IF REQUIRED)



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 Fax (636) 397-1104

BRECKENRIDGE
 TEMPORARY PUMP STATION
 DETAILS
 2003 AMERICAS BEST BUILDER
 Prepared For: TAYLOR MORLEY HO M E S
 17107 Chesterfield Airport Road
 Chesterfield, Missouri 63005
 (314) 934-9000

| REVISIONS | NO. | DATE |
|-----------|-----|------|
| | | |
| | | |
| | | |

ENGINEERS AUTHENTICATION
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 PICKETT RAY & SILVER, INC.
 STATE OF MISSOURI
 ELMER ANDERSON
 LICENSE NO. 100236
 NUMBER: E-16146
 REGISTERED PROFESSIONAL ENGINEER
 1/27/04

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| CHECKED | EAK | DATE | 01/23/04 |
| PROJECT # | 90055TAMO.03R | | |
| TASK # | 1 | FIELD BOOK | X |