

(IN FEET)
1 inch = 50 ft.

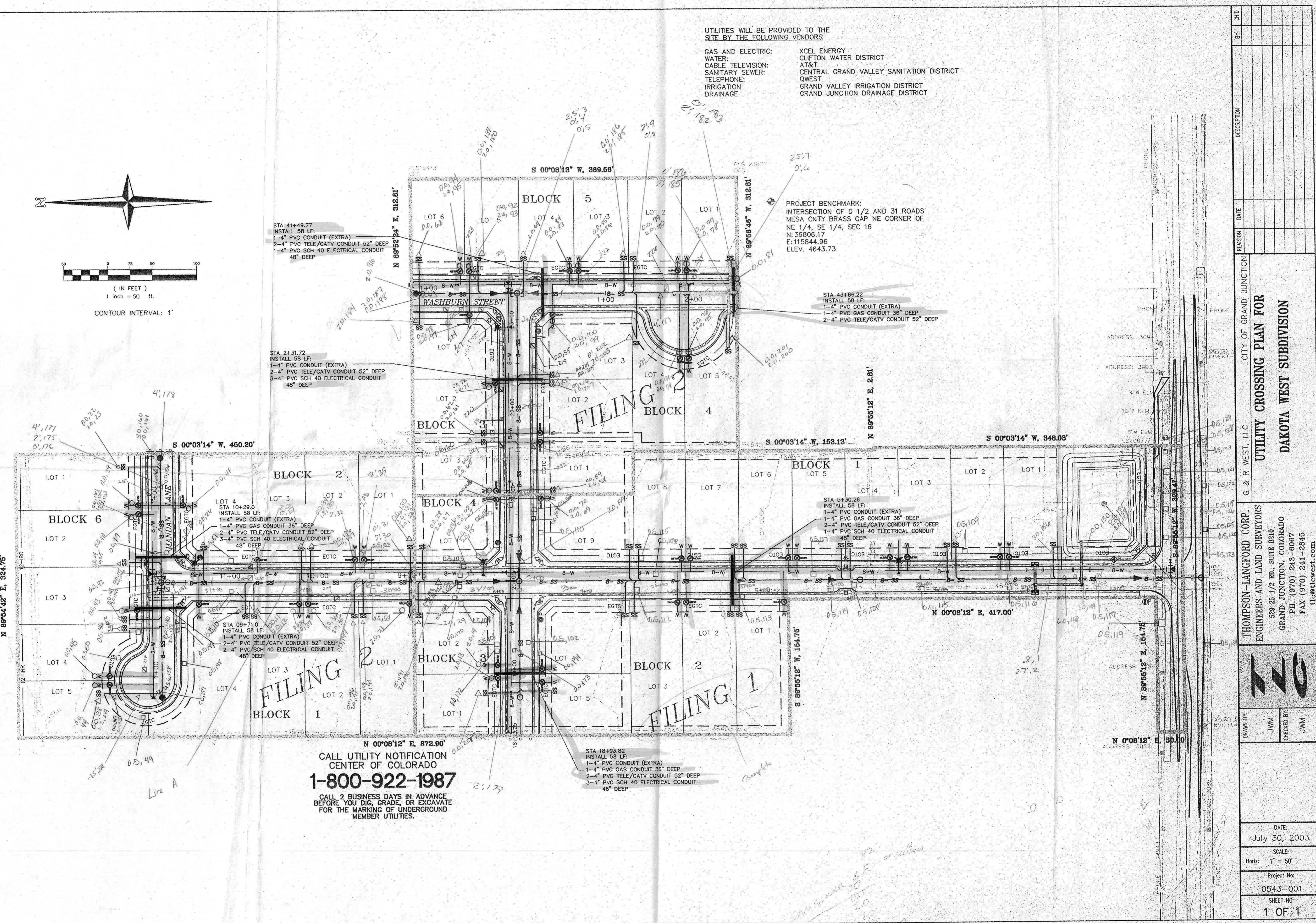
CONTOUR INTERVAL: 1'

UTILITIES WILL BE PROVIDED TO THE SITE BY THE FOLLOWING VENDORS

- GAS AND ELECTRIC: XCEL ENERGY
- WATER: CLIFTON WATER DISTRICT
- CABLE TELEVISION: AT&T
- SANITARY SEWER: CENTRAL GRAND VALLEY SANITATION DISTRICT
- TELEPHONE: WEST
- IRRIGATION: GRAND VALLEY IRRIGATION DISTRICT
- DRAINAGE: GRAND JUNCTION DRAINAGE DISTRICT

PROJECT BENCHMARK:
INTERSECTION OF D 1/2 AND 31 ROADS
MESA CNTY BRASS CAP NE CORNER OF
NE 1/4, SE 1/4, SEC 16
N: 36806.17
E: 115844.96
ELEV. 4643.73

CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2 BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.



| BY | CRD |
|---|------|
| | |
| REVISION | DATE |
| | |
| CITY OF GRAND JUNCTION | |
| UTILITY CROSSING PLAN FOR | |
| DAKOTA WEST SUBDIVISION | |
| G & R WEST, LLC | |
| THOMPSON-LANGFORD CORP. ENGINEERS AND LAND SURVEYORS 529 25 1/2 RD., SUITE 2010 GRAND JUNCTION, COLORADO PH (970) 243-8067 FAX (970) 241-2845 tlc@tlcwest.com | |
| | |
| DRAWN BY: | JWM |
| CHECKED BY: | JWM |
| DATE: July 30, 2003 | |
| SCALE: Horiz: 1" = 50' | |
| Project No: 0543-001 | |
| SHEET NO: 1 OF 1 | |

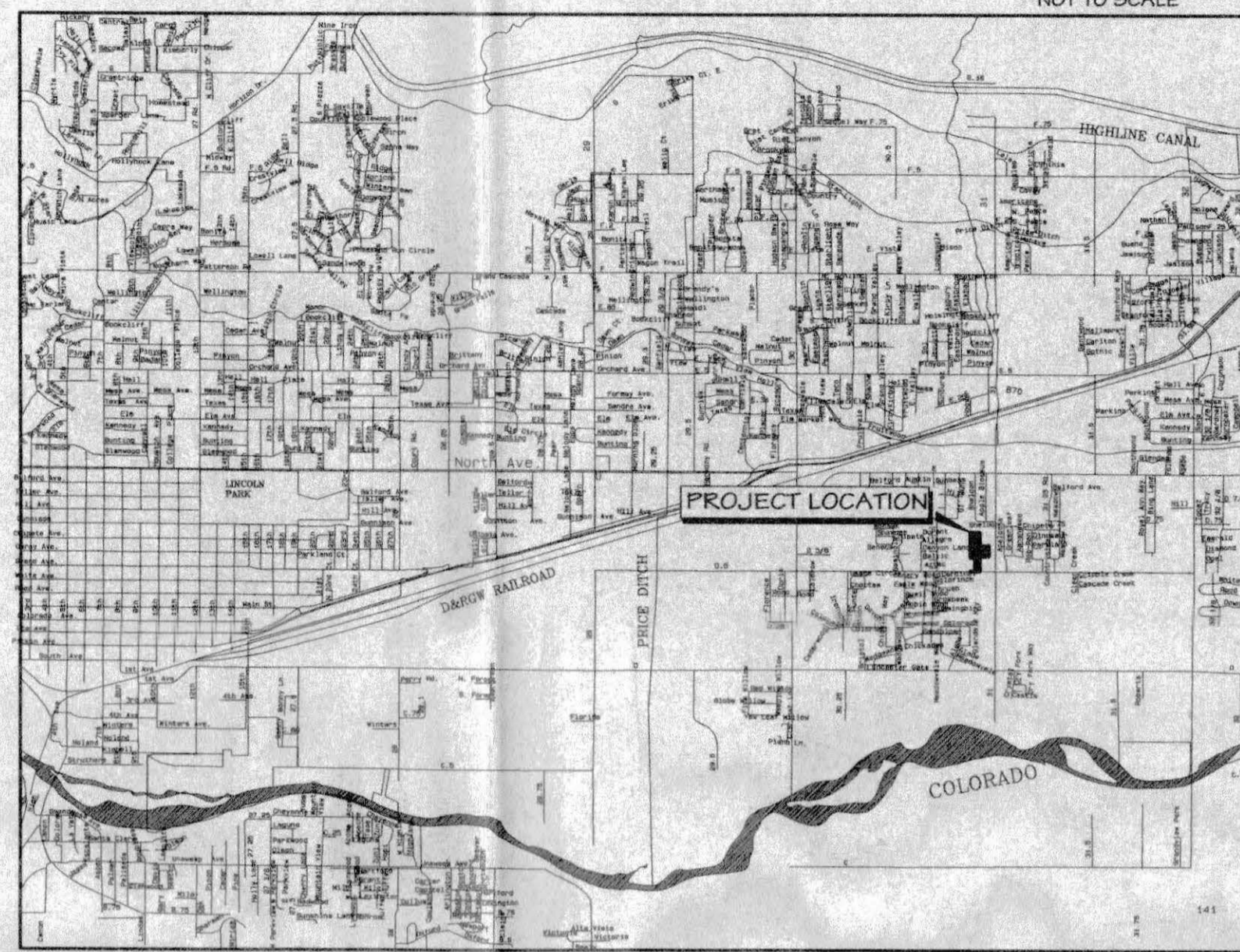
03-079

DAKOTA WEST SUBDIVISION PHASE 2

A REPLAT OF LOTS 10 AND 12, BLOCK 1 OF DAKOTA WEST SUBDIVISION

CITY OF GRAND JUNCTION, MESA COUNTY, COLORADO

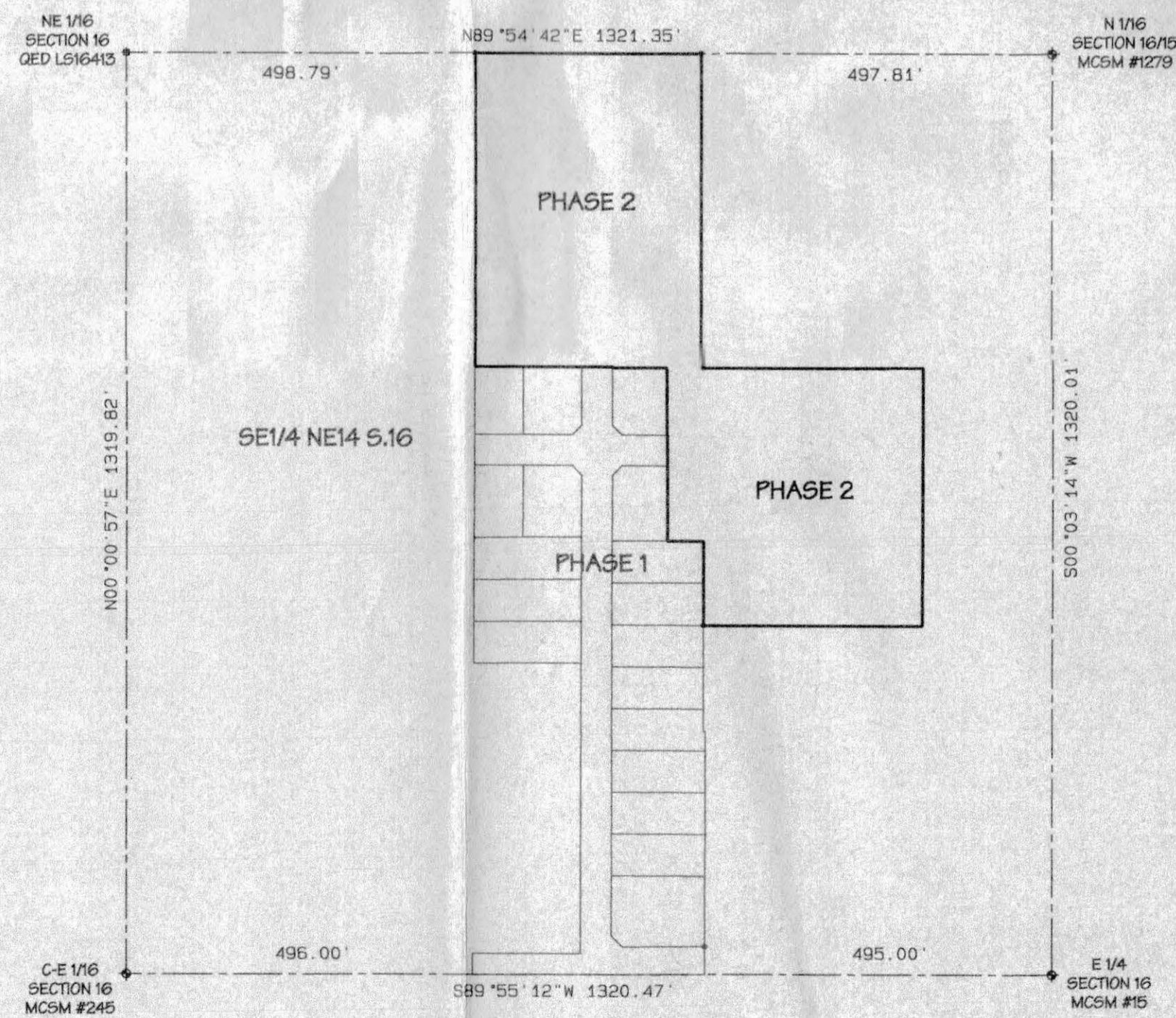
VICINITY MAP



NOTES:

- * Irrigation easement located on the north boundary of subdivision to be granted by separate instrument.

CONTROL DIAGRAM



LAND USE SUMMARY

| LOTS | 5.138 acres | 81.7% |
|--------------|--------------------|-------------|
| STREETS | 1.151 acres | 18.3% |
| TOTAL | 6.289 acres | 100% |

STATEMENT OF OWNERSHIP AND DEDICATION

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, G & R West, LLC, a Colorado Limited Liability Company, is the owner of that real property in the County of Mesa, State of Colorado, described as Reception No's 2058195, 2090357, and 2084768 of the records of the Mesa County Clerk and Recorder, and as shown on the accompanying plat, said property being more particularly described as follows:

Lot 10 Block 1, Dakota West Subdivision
AND
Lot 12 Block 1, Dakota West Subdivision, according to the plat thereof recorded at Reception No. _____ in the office of the Mesa County Clerk and Recorder

That said Owner has by these presents laid out, platted and subdivided the above described real property as shown hereon, and designates the same as DAKOTA WEST SUBDIVISION PHASE 2, a subdivision of the City of Grand Junction, Mesa County, Colorado, and does hereby make the following dedications and grants:

* All streets and roads shown hereon, being Aberdeen Lane, Bismarck Street, and Washburn Street to the full width of their platted rights-of-way are hereby dedicated to the City of Grand Junction for the use of the public forever as public streets, and for drainage and underground utility purposes.

* All multi-purpose easements dedicated to the City of Grand Junction for the use of City approved public utilities as perpetual easements for the installation, operation, maintenance and repair of utilities and appurtenances thereto including but not limited to electric lines, cable TV lines, natural gas pipelines, sanitary sewer lines, water lines, telephone lines, irrigation lines, drainage, and also for the installation and maintenance of traffic control facilities, street lighting, trees and grade structures.

* All drainage easements are to be granted by separate instrument to the Dakota West Homeowners Association as perpetual easements for conveyance of runoff water which originates from the property hereby platted, subject to the terms, conditions and restrictions set forth in said grant. Grant recorded in Book _____ at Page _____.

* All easements include the right of ingress and egress on, along, over, under, through and across by the beneficiaries, their successors, or assigns, together with the right to trim or remove interfering trees and brush; provided however, that the beneficiaries/owners shall utilize the same in a reasonable and prudent manner. Furthermore, the owners of said lots hereby platted shall not burden or overburden said easements by erecting or placing any improvements thereon which may prevent reasonable ingress and egress to and from the easement.

Said owners further certify that all lienholders are represented hereon.

IN WITNESS WHEREOF said owners have caused their names to be hereunto subscribed:

G & R West, L.L.C., a Colorado Limited Liability Company.

By _____
Managing Partner

State of _____)
County of _____)

The foregoing Statement of Ownership and Dedication was acknowledged before me by _____ as Managing Partner of G & R West, LLC this _____ day of _____, 2003 for the aforementioned purposes.

Notary Public _____

My commission expires: _____

DECLARATION OF COVENANTS

This property is subject to the terms of the covenants, conditions, and restrictions contained in an instrument recorded in Book _____ at Page _____.

TITLE CERTIFICATION

We, First American Heritage Title Company, a title insurance company, as duly licensed in the State of Colorado, hereby certify that we have examined the title to the hereon described property, that we find the title to the property is vested to G & R West, LLC, a Colorado Limited Liability Company; That the current taxes have been paid; That all mortgages not satisfied or released of record nor otherwise terminated by law are shown hereon and that there are no other encumbrances of record; That all easements, reservations and rights of way of record are shown hereon.

DATE: _____ BY: _____
NAME AND TITLE
First American Heritage Title Company

CITY APPROVAL

This plat of DAKOTA WEST SUBDIVISION PHASE 2, a subdivision of the City of Grand Junction, County of Mesa, State of Colorado, was approved this _____ day of _____, 2003.

City Manager _____ Mayor _____

CLERK AND RECORDER'S CERTIFICATE

State of Colorado)
County of Mesa)

This plat was accepted for filing in the office of the Clerk and Recorder of Mesa County, Colorado, at _____ o'clock _____ M., on this _____ day of _____, 2003, A.D., and was recorded at Reception No. _____ in Flat Book _____ at Page _____ Drawer No. _____.

Fees _____.

By: _____
Clerk and Recorder Deputy

SURVEYOR'S STATEMENT

I, Dennis R. Shellhorn, a registered Professional Land Surveyor in the State of Colorado, do hereby state that the accompanying plat of DAKOTA WEST SUBDIVISION PHASE 2, a subdivision of a part of the City of Grand Junction, Colorado, has been prepared by me and/or under my direct supervision and represents a field survey of the same. This plat conforms to the requirements for subdivision plats specified in the City of Grand Junction Development Code and the applicable laws of the State of Colorado to the best of my knowledge and belief. This statement is only applicable to the survey data hereon, and does not represent a warranty or opinion as to ownership, lienholders, or quality of title.

Dennis R. Shellhorn,
Colorado PLS 18478

This survey does not constitute a title search by this surveyor or Thompson-Langford Corporation. All information regarding ownership, rights-of-way, easements of record, adjoiners, and other documents that may affect the quality of title to this property is from a title commitment prepared by First American Heritage Title Company, No. 00145173, dated March 25, 2002, Meridian Land Title, LLC, No. 55610, dated March 20, 2002, and Meridian Land Title, LLC, No. 55245, dated May 1, 2002.

NOTE:

A foundation observation report by a licensed Engineer is required for building construction.

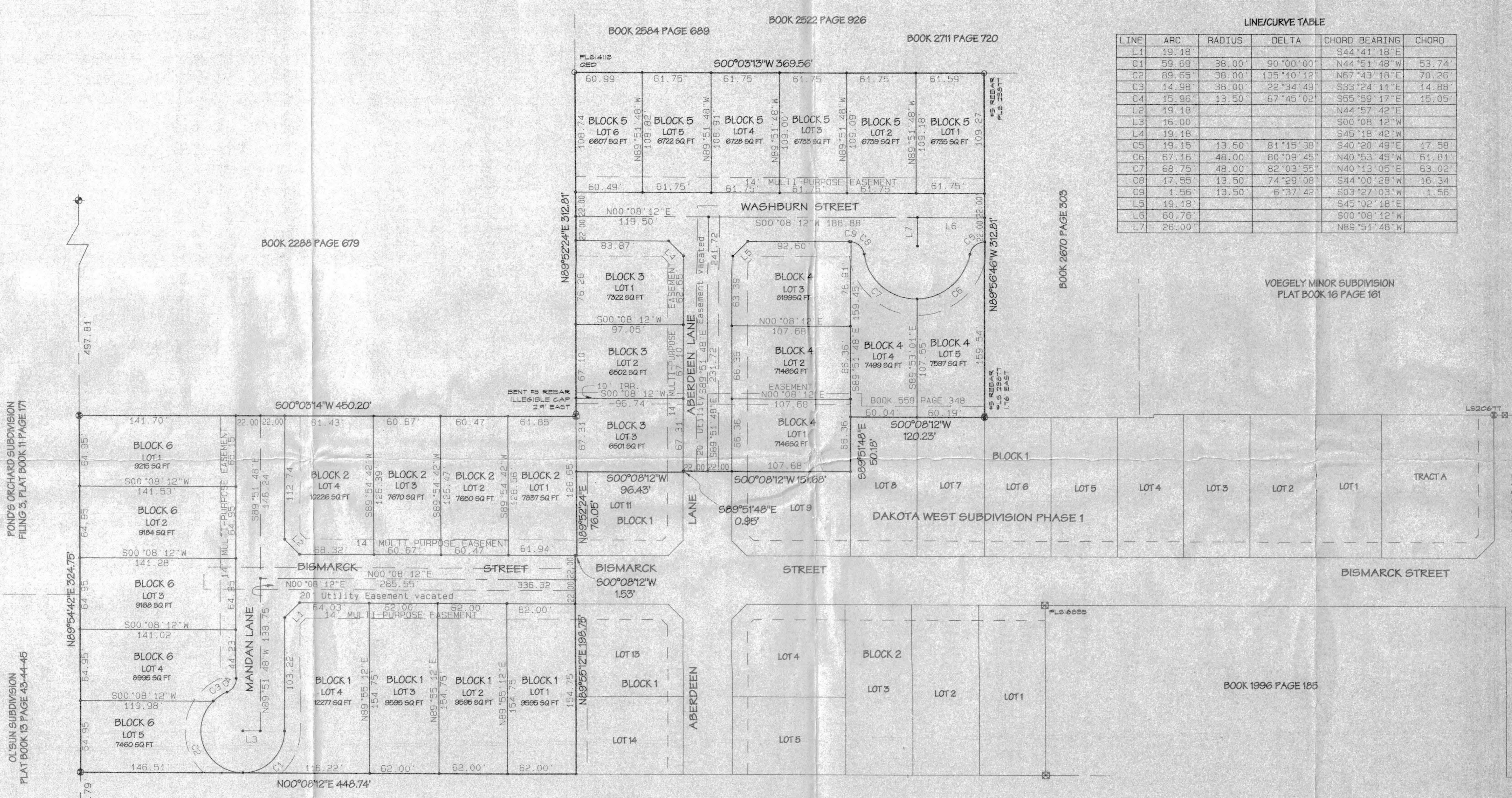
DAKOTA WEST SUBDIVISION
PHASE 2
G & R WEST LLC

SECTION 1/4 NE 1/4 S. 16 T13N R1E1 E8pt MERIDIAN
THOMPSON-LANGFORD CORPORATION
589 25 1/2 ROAD - B-210 (970) 243-6087
Grand Junction CO 81808 tlo@tlcwest.com
S:\Survey\0543_G&R West\platPH2.pro Job No. 0543-002
Drawn: bkd Checked: drs Date: Jun 13 2003 Sheet 1 of 2

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

03-079

DAKOTA WEST SUBDIVISION PHASE 2



LINE/CURVE TABLE

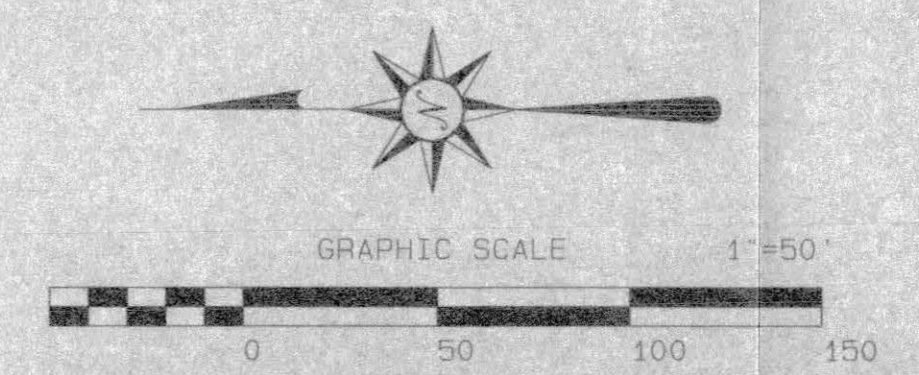
| LINE | ARC | RADIUS | DELTA | CHORD BEARING | CHORD |
|------|--------|--------|------------|---------------|--------|
| L1 | 19.18' | | | S44°41'18"E | |
| C1 | 59.69' | 38.00' | 90°00'00" | N44°51'48"W | 53.74' |
| C2 | 89.65' | 38.00' | 135°10'12" | N67°43'18"E | 70.26' |
| C3 | 14.98' | 38.00' | 22°34'49" | S33°24'11"E | 14.88' |
| C4 | 15.96' | 13.50' | 67°45'02" | S55°59'17"E | 15.05' |
| L2 | 19.18' | | | N44°57'42"E | |
| L3 | 16.00' | | | S00°08'12"W | |
| L4 | 19.18' | | | S45°18'42"W | |
| C5 | 19.15' | 13.50' | 81°15'38" | S40°20'49"E | 17.58' |
| C6 | 67.16' | 48.00' | 80°09'45" | N40°53'45"W | 61.81' |
| C7 | 68.75' | 48.00' | 82°03'55" | N40°13'05"E | 63.02' |
| C8 | 17.55' | 13.50' | 74°29'08" | S44°00'28"W | 16.34' |
| C9 | 1.56' | 13.50' | 6°37'42" | S03°27'03"W | 1.56' |
| L5 | 19.18' | | | S45°02'18"E | |
| L6 | 60.76' | | | S00°08'12"W | |
| L7 | 26.00' | | | N89°51'48"W | |

POND'S ORCHARD SUBDIVISION
FILING 3, PLAT BOOK 11 PAGE 171

OLSUN SUBDIVISION
PLAT BOOK 13 PAGE 43-44-45

NOTE:
A foundation observation report by a licensed Engineer is required for building construction.

- LEGEND
- ◆ FOUND BRASS CAP MESA COUNTY SURVEY MARKER
 - ⊕ FOUND 3-1/4" ALUM. CAP
 - SET #5 REBAR/CAP PLS 1847B IN CONCRETE
 - SET #5 REBAR/CAP PLS 1847B
 - FOUND PIN & ALUMINUM CAP AS NOTED
 - FOUND PIN & PLASTIC CAP AS NOTED



BASIS OF BEARINGS STATEMENT: Bearings are based on grid north of the Mesa County Local Coordinate System, locally determined by GPS observations on the brass cap Mesa County survey marker at the Center-East one-sixteenth corner, and the brass cap Mesa County Survey at the East one-quarter corner of Section 16. The measured bearing of this line is N89°51'48"E.

DAKOTA WEST SUBDIVISION PHASE 2

G & R WEST LLC

SECTION: 1/4 NE 1/4 S 16 TOWNSHIP: 1 South RANGE: 1 East MERIDIAN: UTE

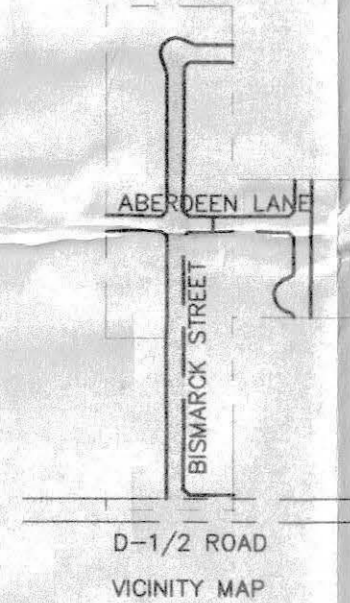
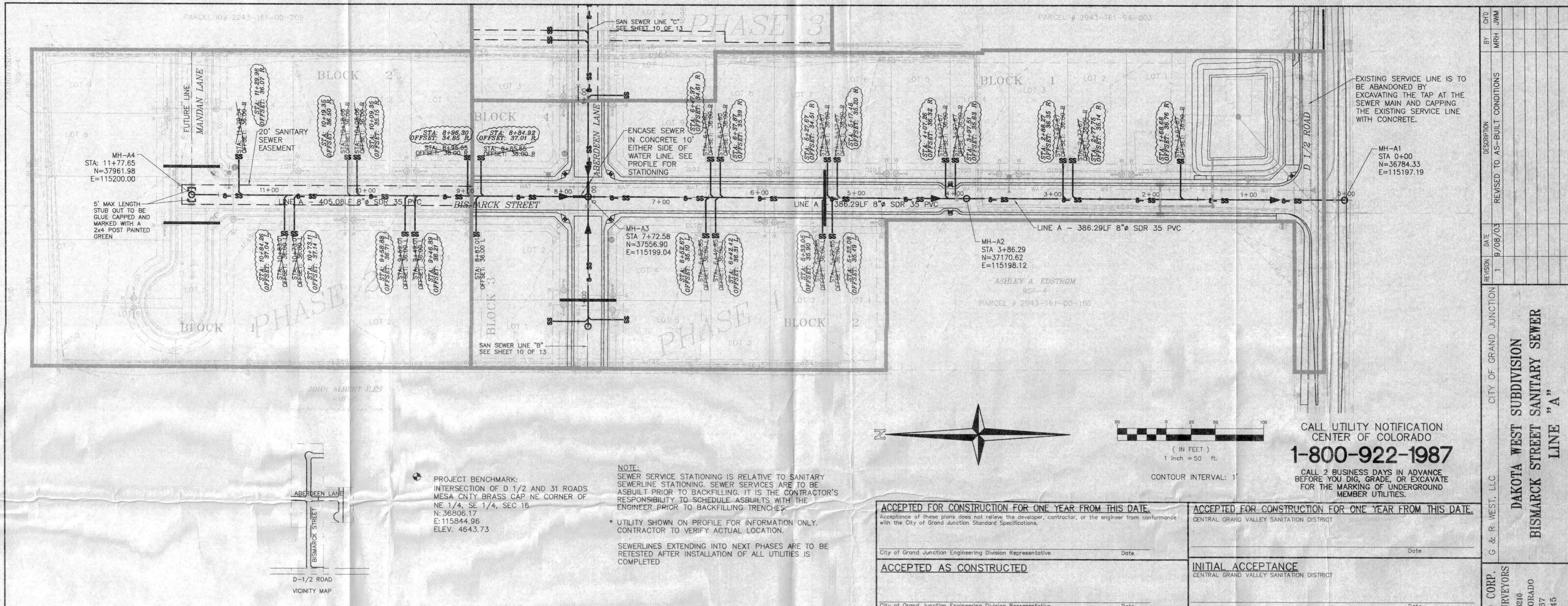
THOMPSON-LANGFORD CORPORATION
829 28 1/2 ROAD - B-210 (970) 243-6067
Grand Junction CO 81505 tlc@tlowest.com

S:\Survey\0543\GSP_West\p1atPH2.pro Job No. 0543-002
Drawn: bkb Checked: drs Date: Jun 13, 2003 Sheet 2 of 2

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

SEE SHEET 1 FOR SURVEYOR'S CERTIFICATE

83-079



PROJECT BENCHMARK:
 INTERSECTION OF D 1/2 AND 31 ROADS
 MESA CNTY BRASS CAP NE CORNER OF
 NE 1/4, SE 1/4, SEC 16
 N=36306.17
 E=115844.96
 ELEV. 4643.73

NOTE:
 SEWER SERVICE STATIONING IS RELATIVE TO SANITARY
 SEWERLINE STATIONING. SEWER SERVICES ARE TO BE
 ASBUILT PRIOR TO BACKFILLING. IT IS THE CONTRACTOR'S
 RESPONSIBILITY TO SCHEDULE ASBUILTS WITH THE
 ENGINEER PRIOR TO BACKFILLING TRENCHES.

* UTILITY SHOWN ON PROFILE FOR INFORMATION ONLY.
 CONTRACTOR TO VERIFY ACTUAL LOCATION.

SEWERLINES EXTENDING INTO NEXT PHASES ARE TO BE
 RETESTED AFTER INSTALLATION OF ALL UTILITIES IS
 COMPLETED

ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
 Acceptance of these plans does not relieve the developer, contractor, or the engineer from conformance
 with the City of Grand Junction Standard Specifications.

City of Grand Junction Engineering Division Representative _____ Date _____

ACCEPTED AS CONSTRUCTED

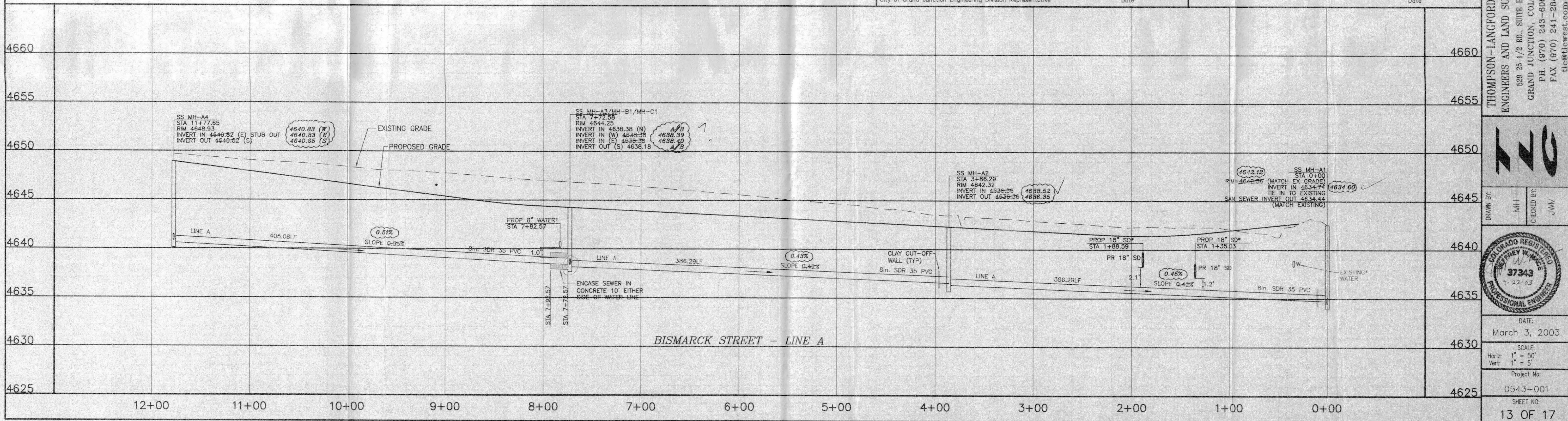
City of Grand Junction Engineering Division Representative _____ Date _____

ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
 CENTRAL GRAND VALLEY SANITATION DISTRICT

 Date _____

INITIAL ACCEPTANCE
 CENTRAL GRAND VALLEY SANITATION DISTRICT

 Date _____



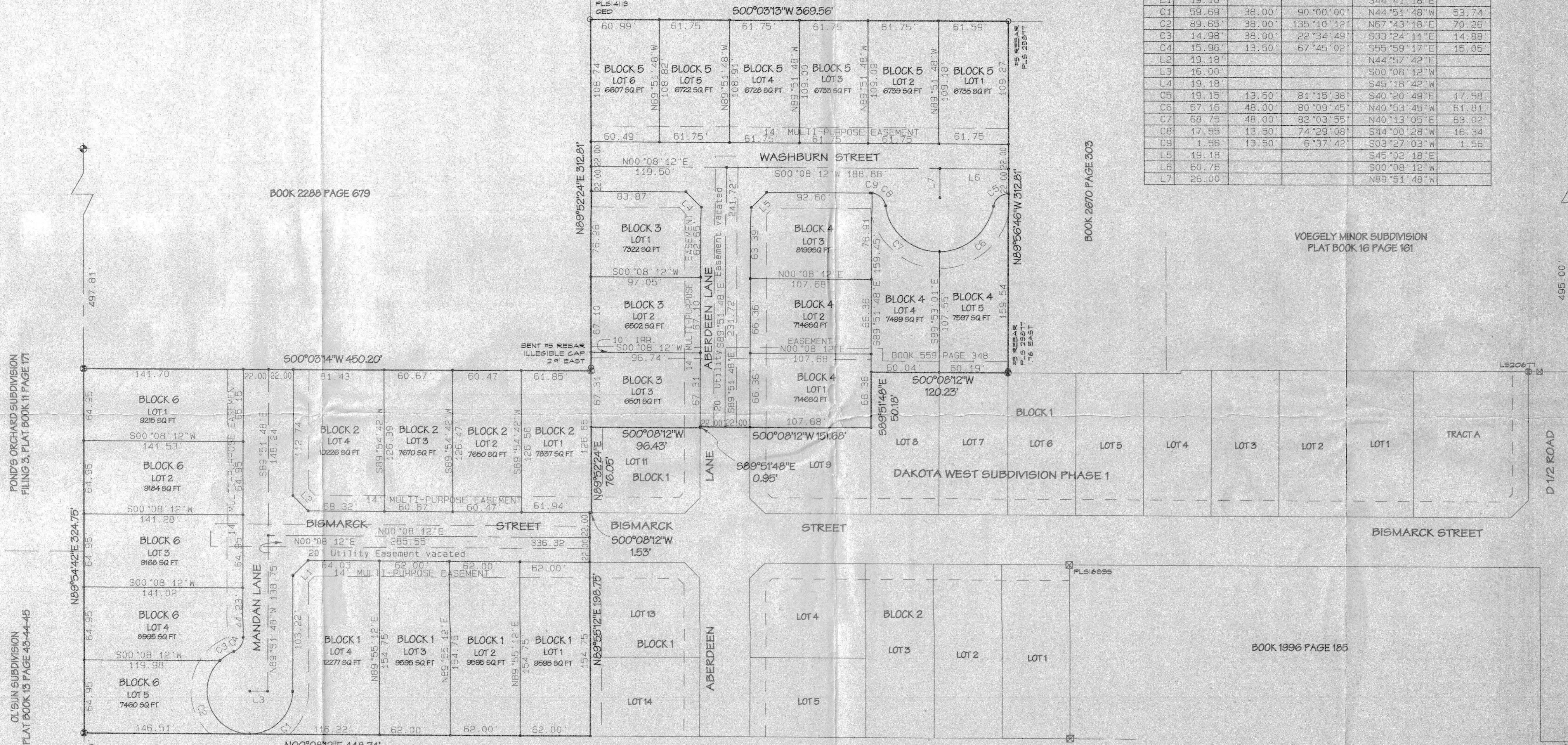
| | | | | | | | |
|------------------------------|---|------------|-----|----------------------|--------------------------------|----|-----|
| DATE | 9/08/03 | REVISION | 1 | DESCRIPTION | REVISED TO AS-BUILT CONDITIONS | BY | JMM |
| CITY OF GRAND JUNCTION | DAKOTA WEST SUBDIVISION BISMARCK STREET SANITARY SEWER LINE "A" | | | | | | |
| ENGINEERS AND LAND SURVEYORS | THOMPSON-LANGFORD CORP. 529 25 1/2 RD., SUITE B210 GRAND JUNCTION, COLORADO PH. (970) 243-6067 FAX (970) 241-2845 tlc@tlwest.com | | | | | | |
| DRAWN BY | MH | CHECKED BY | JMM | DATE: March 3, 2003 | | | |
| | | | | SCALE: 1" = 50' | | | |
| DATE: March 3, 2003 | | | | Project No: 0543-001 | | | |
| SCALE: 1" = 50' | | | | SHEET NO: 13 OF 17 | | | |

DAKOTA WEST SUBDIVISION PHASE 2

BOOK 2584 PAGE 689 BOOK 2522 PAGE 926 BOOK 2711 PAGE 720

LINE/CURVE TABLE

| LINE | ARC | RADIUS | DELTA | CHORD BEARING | CHORD |
|------|--------|--------|------------|---------------|--------|
| L1 | 19.18' | | | S44°41'18"E | |
| C1 | 59.69' | 38.00' | 90°00'00" | N44°51'48"W | 53.74' |
| C2 | 89.65' | 38.00' | 135°10'12" | N67°43'18"E | 70.26' |
| C3 | 14.98' | 38.00' | 22°34'49" | S33°24'11"E | 14.88' |
| C4 | 15.96' | 13.50' | 67°45'02" | S55°59'17"E | 15.05' |
| L2 | 19.18' | | | N44°57'42"E | |
| L3 | 16.00' | | | S00°08'12"W | |
| L4 | 19.18' | | | S45°18'42"W | |
| C5 | 19.15' | 13.50' | 81°15'38" | S40°20'49"E | 17.58' |
| C6 | 67.16' | 48.00' | 80°09'45" | N40°53'45"W | 61.81' |
| C7 | 68.75' | 48.00' | 82°03'55" | N40°13'05"E | 63.02' |
| C8 | 17.55' | 13.50' | 74°29'08" | S44°00'28"W | 16.34' |
| C9 | 1.56' | 13.50' | 6°37'42" | S03°27'03"W | 1.56' |
| L5 | 19.18' | | | S45°02'18"E | |
| L6 | 60.76' | | | S00°08'12"W | |
| L7 | 26.00' | | | N89°51'48"W | |



POND'S ORCHARD SUBDIVISION
FILING 3, PLAT BOOK 11 PAGE 171

O'SUN SUBDIVISION
PLAT BOOK 15 PAGE 43-44-45

BOOK 2670 PAGE 303

VOEGELY MINOR SUBDIVISION
PLAT BOOK 16 PAGE 181

495.00'

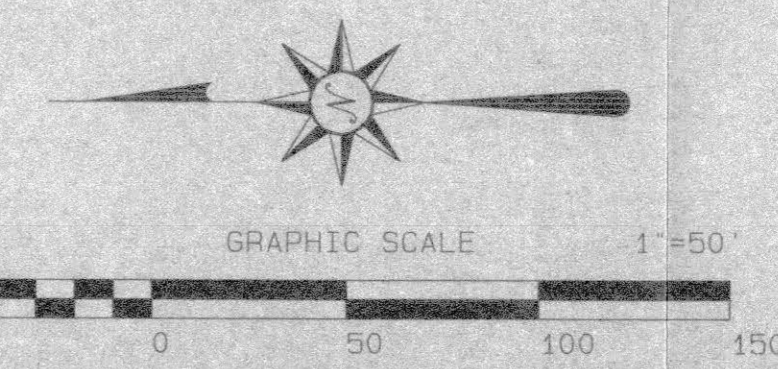
D 1/2 ROAD

495.00'

NOTE:
A foundation observation report by a licensed Engineer is required for building construction.

LEGEND

- FOUND BRASS CAP MESA COUNTY SURVEY MARKER
- FOUND 3-1/4" ALUM. CAP
- ⊕ SET #5 REBAR/CAP PLS. 1847B IN CONCRETE
- SET #5 REBAR/CAP PLS. 1847B
- FOUND PIN & ALUMINUM CAP AS NOTED
- FOUND PIN & PLASTIC CAP AS NOTED



BASIS OF BEARINGS STATEMENT: Bearings are based on grid north of the Mesa County Local Coordinate System, locally determined by GPS observations on the brass cap Mesa County survey marker at the Center-East one-sixteenth corner, and the brass cap Mesa County Survey at the East one-quarter corner of Section 16. The measured bearing of this line is N89°55'12"E.

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

SEE SHEET 1 FOR SURVEYOR'S CERTIFICATE

**DAKOTA WEST SUBDIVISION
PHASE 2**
G & R WEST LLC

SECTION: SE1/4 NE1/4 S.16 T.16N R.1E
THOMPSON-LANGFORD CORPORATION
 529 28 1/2 ROAD - B-210 (970) 243-8067
 Grand Junction CO 81808 tlc@tlwest.com

S:\Survey\0543_G&R_West\platPH2.dwg Job No. 0543-002
 Drawn: dbk Checked: drs Date: Jun 13, 2003 Sheet 2 of 2

63-079

G & R WEST, LLC

2650 El Corona Drive
Grand Junction, Co. 81501
PH. (970) 255-8164

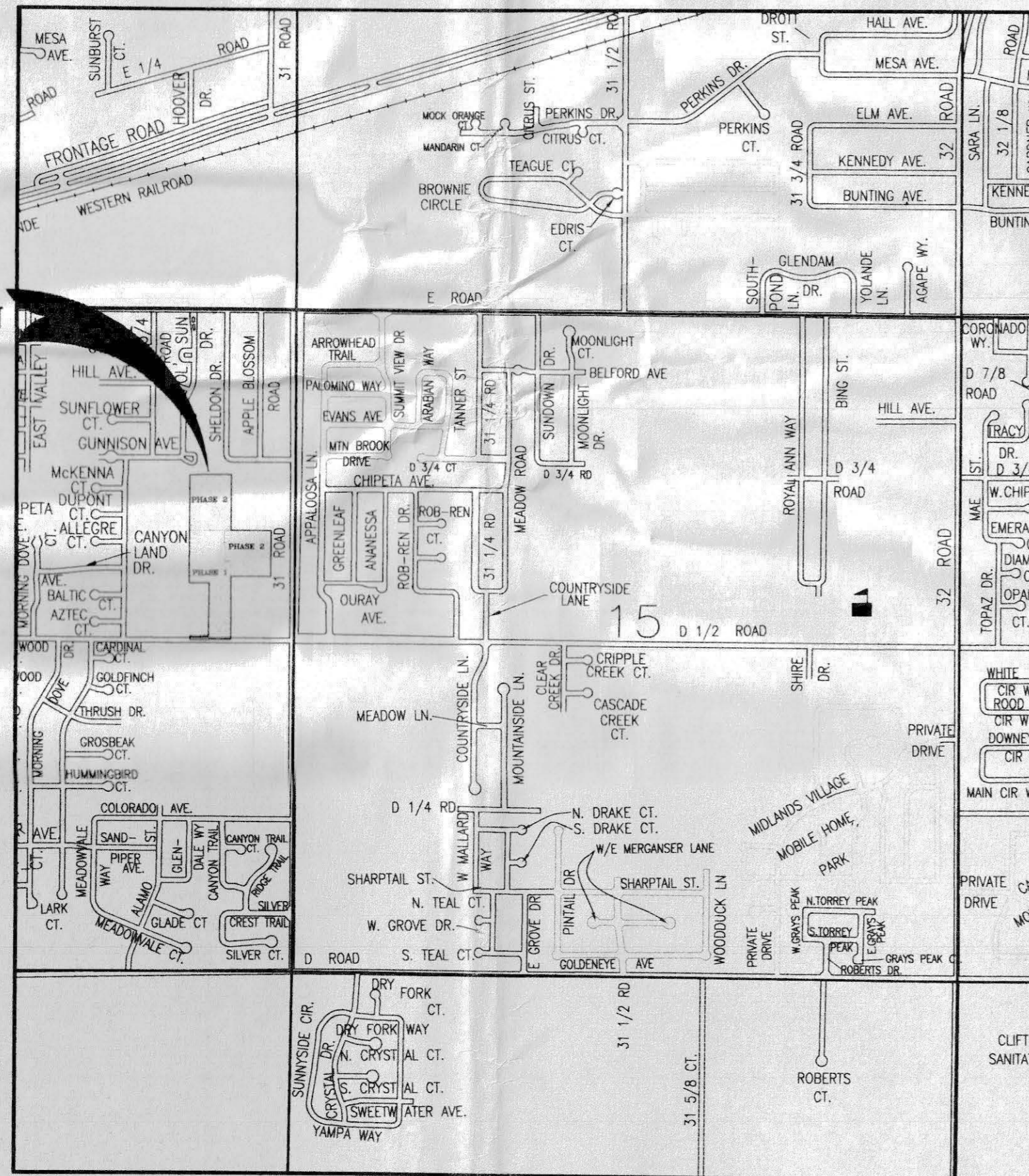
FINAL CONSTRUCTION PLANS
FOR

DAKOTA WEST SUBDIVISION (FILING 2)

SUBMITTED

APRIL 23, 2003

PROJECT LOCATION



VICINITY MAP

TITLE

| | |
|----------------|--|
| SHEET 1 OF 12 | COVER SHEET/LOCATION MAP |
| SHEET 2 OF 12 | GENERAL LEGEND AND CONSTRUCTION NOTES |
| SHEET 3 OF 12 | UTILITY/COMPOSITE PLAN |
| SHEET 4 OF 12 | GRADING & DRAINAGE PLAN |
| SHEET 5 OF 12 | STORM WATER MANAGEMENT PLAN |
| SHEET 6 OF 12 | BISMARCK STREET/MANDAN LANE PLAN AND PROFILE |
| SHEET 7 OF 12 | ABERDEEN LANE/WASHBURN STREET PLAN AND PROFILE |
| SHEET 8 OF 12 | LINE "D" SANITARY SEWER PLAN & PROFILE |
| SHEET 9 OF 12 | LINE "E" SANITARY SEWER PLAN & PROFILE |
| SHEET 10 OF 12 | CLIFTON WATER DETAIL SHEET 1 |
| SHEET 11 OF 12 | CLIFTON WATER DETAIL SHEET 2 |
| SHEET 12 OF 12 | CENTRAL GRAND VALLEY SANITATION DISTRICT DETAILS |

THOMPSON-LANGFORD CORP.

529 25 1/2 RD., SUITE B210
GRAND JUNCTION, COLORADO
PH. (970) 243-6067

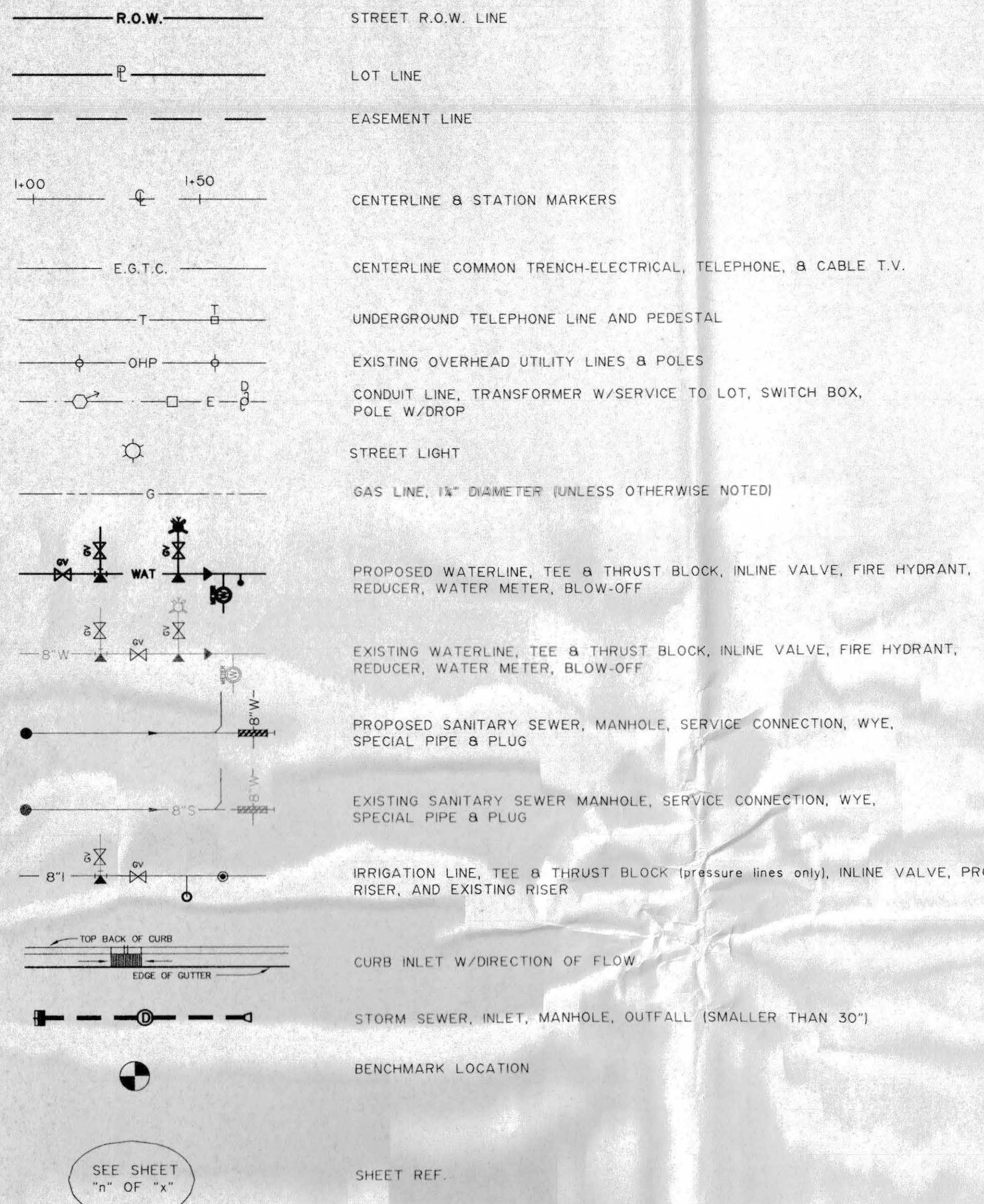
JOB NO. 0543-001

| | |
|---|------------|
| ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. | |
| <small>Acceptance of these plans does not relieve the developer, contractor, or engineer from conformance with the City of Grand Junction Standard Specifications for Road and Bridge Construction.</small> | |
| City of Grand Junction Engineering Division Representative _____ | Date _____ |
| ACCEPTED AS CONSTRUCTED | |
| CITY OF GRAND JUNCTION ENGINEERING | |
| City of Grand Junction Engineering Division Representative _____ | Date _____ |

EP-2003-079 5/6/03
Planners review set

S:\dgs\0543-001\langford\PHASE-2\COVER.DWG, 4/22/2003 11:52:40 AM, HP DesignPlot 750C Plus (E_A0).pct

LEGEND



GENERAL CONSTRUCTION NOTES

- Alignment, centerline curve data, and stationing to be verified from approved subdivision plat before construction.
- Locations of existing utilities shown on these plans are approximate only. Contractor is to contact affected utility for specific locations before digging.
- All satisfactory excess excavation from either utility or street construction shall be spread uniformly across the lots as directed by the Owner or his designated representative. All unsatisfactory or waste material including vegetation, roots, concrete, rocks, or other debris, shall be hauled from the project by the Contractor. No separate pay.
- Contractor shall give 48 hour notice to all authorized inspectors, superintendents, or person in charge of public and private utilities affected by his operations prior to commencement of work. Contractor shall assure himself that all construction permits have been obtained prior to commencement of work. All permits obtainable by the Contractor shall be obtained at the Contractor's expense.
- Contractor shall confine his construction operations to the rights-of-way, easements, and lots, as shown on Plans and Plat. Any damage to private facilities outside these limits shall be repaired by the Contractor at no expense to the Owner.
- All road construction, and related work, all materials, performance and quality of work, shall conform to the requirements of the City of Grand Junction Standards and Specifications.
- All utility installations are to be performed in accordance with the technical specifications of the City of Grand Junction. All water and sewer lines must be tested and approved prior to street construction. All water lines to be constructed in accordance with the technical specifications of Clifton Water District. All sewer lines to be constructed in accordance with the technical specifications of the Central Grand Valley Sanitation District.
- Contractor shall familiarize himself with the geotechnical testing requirements of the City of Grand Junction and the affected utility districts. Though the owner is paying for the testing, it shall be the responsibility of the Contractor to contact the testing firm 24 hours in advance of the need for testing, and to verify that the appropriate numbers of tests have been taken. The results of the required types of tests and numbers of passing tests shall be furnished to the Engineer for verification before final acceptance by the Owner will be granted. All failing tests shall be brought to the immediate attention of the Engineer and retests shall be performed until passing results are obtained. All utility lines, including service lines falling within Public rights-of-way or Public easements shall be tested.
- Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for utility trench backfill unless otherwise approved by the Engineer.

STORM SEWER CONSTRUCTION NOTES

- All storm sewer line construction shall be in accordance with the City of Grand Junction Standards and Specifications.
- All Reinforced Concrete storm sewer pipe shall conform to ASTM Standard Specifications, C-76, Class III unless otherwise noted.
- All polyvinyl chloride (PVC) pipe and fittings shall conform to ASTM Standard Specifications, D3034 and F679, SDR-35 unless otherwise noted.
- All High Density Polyethylene (HDPE) pipe and fittings to conform to the following:
12 inch to 36 inch shall meet ASSHTO M294,
42 inch to 48 inch shall meet ASSHTO MP6.

SANITARY SEWER CONSTRUCTION NOTES

- All sewer line construction shall conform to the Central Grand Valley Sanitation District Standards and Specifications.
- All materials and workmanship shall conform to the Standards and Specifications of the Central Grand Valley Sanitation District. The Central Grand Valley Sanitation District reserves the right to accept or reject any materials and or workmanship that does not conform to its Standards and Specifications.
- The Contractor shall have one signed copy of the Plans and a copy of the Central Grand Valley Sanitation District Standards and Specifications at the job site at all times.
- All sanitary sewer pipe shall be PVC SDR-35 unless otherwise specified. All pipe joints shall be 13 foot joints unless otherwise approved by the Project Engineer.
- All sewer mains to be laid to grade utilizing a "pipe laser".
- All sanitary sewer services to be 4 inch PVC SDR-35 unless otherwise specified.
- Cleanouts are required at 100 foot intervals on all lines greater than 100 feet in length.
- All service line connections to the new main shall be accomplished with full body wyes or tees. Tapping saddles will not be allowed.
- A minimum of 10 feet of horizontal separation shall be maintained at all times between the waterline and sewer line except at specified crossings.
- Where sanitary sewers cross under waterline with less than 18 inches of vertical separation, and in all cases where the sanitary sewer crosses over the waterline at any depth, provide total Concrete Encasement of pipe for a length of 10 feet either side of waterline. See the Central Grand Valley Sanitation District Details. Include cost of waterline crossing (Total concrete pipe encasement, pipe, and approved backfill), in unit price bid per lineal foot of sanitary sewer in appropriate sizes.
- Sewer service stub-outs shall extend 14 feet beyond the property line or through front lot easements, whichever is greater, and shall be glue capped and marked with a steel fence post painted green and buried so that 3 feet remains above grade. As-built surveying for vertical grade of stub-out required PRIOR to backfill.
- No service line shall be connected directly into a manhole.
- The Contractor is responsible for all required sewer line testing to be completed in accordance with the Central Grand Valley Sanitation District Standards and Specifications. Final testing to be accomplished only after all other infrastructure has been installed. This includes waterlines, gas lines, electric lines, etc. Testing will be performed after all compaction of street subgrade and prior to street paving. Final lamping will also be accomplished after paving is completed to insure that the line is clean. These tests will be the basis for issuing initial Acceptance of the sewer line extension.
- Manholes shall be constructed as shown on the Central Grand Valley Sanitation District Standard Sanitary Sewer Detail sheet.
- Water stop gaskets and clamp assemblies are to be furnished and installed at all connections to manholes.
- Metal grade rings are NOT to be used on top of manhole rings to adjust to finish pavement elevation. All adjustments to finish grade on new manholes shall be made using concrete grade rings and grout beneath the cast iron ring as shown on the Standard Sanitary Sewer Detail sheet.
- All trenches shall be compacted to 95% within 2% of optimum moisture content, as determined by AASHTO T-99. Contractor shall be required to perform all necessary compaction tests through a certified soils lab. A copy of the compaction test results shall be provided to the District during the course of the project.
- Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for sewer line trench back fill unless otherwise approved by the Engineer.
- To inhibit the movement of groundwater through sewer bedding and haunching material, clay cutoff walls of native material are to be constructed approximately 10 feet upstream from each manhole as shown on sanitary sewer plan and profiles. The cut-off wall shall extend from 6 inches below to 6 inches above granular back fill material and shall be 2 feet wide. If native material is not suitable, the Contractor shall import material approved by the Engineer.
- When installing manholes over existing sewer lines: Contractor is to expose existing sanitary sewer main to allow the Engineer to field verify existing pipe inverts PRIOR to construction of manholes and adjust invert elevations if required. The Contractor shall place type "A" bedding material and pour the base of the manhole and complete the manhole as per the Standard Sanitary Sewer Details, Central Grand Valley Sanitation District. The Contractor at that time can notch out or cut the existing pipe out to the spring line of the pipe. The Contractor shall control all live sewage flow and shall not allow debris from the cutting or other work to enter the existing pipe line while the work is being done.
- The Contractor should notify the District at least 48 hrs. prior to commencement of construction.
- All sanitary sewer notes apply to all sheets pertaining to the sanitary sewer line.
- Red Line As-built Drawings shall be submitted to the City Utility Engineer at least 72 hours PRIOR to paving for review.
- The Contractor shall obtain a City of Grand Junction Street Cut Permit for all work within existing City Right-of-way.
- When connecting to existing manholes, it is necessary to provide a "PSX" positive seal gasket to accommodate the new invert-in. The manhole base and wall is to be grouted to provide a water tight seal and the invert grouted as necessary to provide for a smooth invert channel. All grout used on the invert channel should be suitable for

PAVING CONSTRUCTION NOTES

- All road widths, and radii are to face of curb or flowline unless noted otherwise. Any "spot" design elevations are to flowline of curb and gutter unless otherwise noted.
- TOC = top of curb elevation
BOW = back of sidewalk
EOP = edge of pavement elevation
RIM = rim of manhole
INV = invert elev. of manhole or inlet
CL = centerline
PL = property line
FL = flowline
EI = elevation
- The top 6" of existing ground or the top 6" of areas cut to final grade are to be scarified, moistened and recompact to 95% of AASHTO T99 to a depth of 6" before starting up with embankments or before base is placed.
- Contractor to protect existing utilities and appurtenances. Manholes, drainage inlets, utility lines, etc., damaged, covered or filled with dirt or debris by the Contractor shall be cleaned and repaired at no expense to the Owner.
- Aggregate base course must be compacted 95% within 2% of optimum moisture content, as determined by AASHTO T-180.
- Hot-mix asphaltic concrete to be CDOT Grading C. A mix design for the proposed pit must be approved by Engineer prior to placement of pavement.
- Where proposed pavement is to match existing pavement, existing pavement is to be square cut, full base thickness is to be brought to match line and existing surface is to be tack-coated before proposed surface is placed.
- Handicap ramps are to be constructed where indicated on the plans and in accordance with current City of Grand Junction Standard Details.
- Curb, gutter and drainage pans are to have expansion joints at each change in horizontal alignment of curb and gutter, but in no case at a greater distance apart than 100 feet. Locate dummy grooved joints between expansion joints at intervals not exceeding 10 feet.
- Include backing of curb and gutter and or sidewalk with native fill material per the typical roadway section in the unit price bid for embankment.

WATERLINE CONSTRUCTION

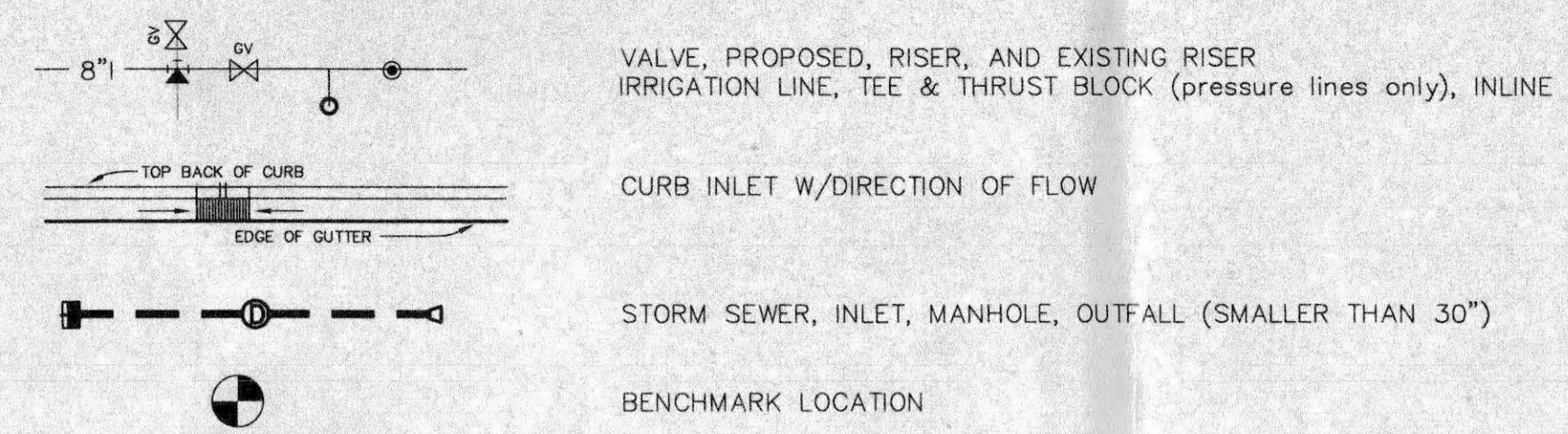
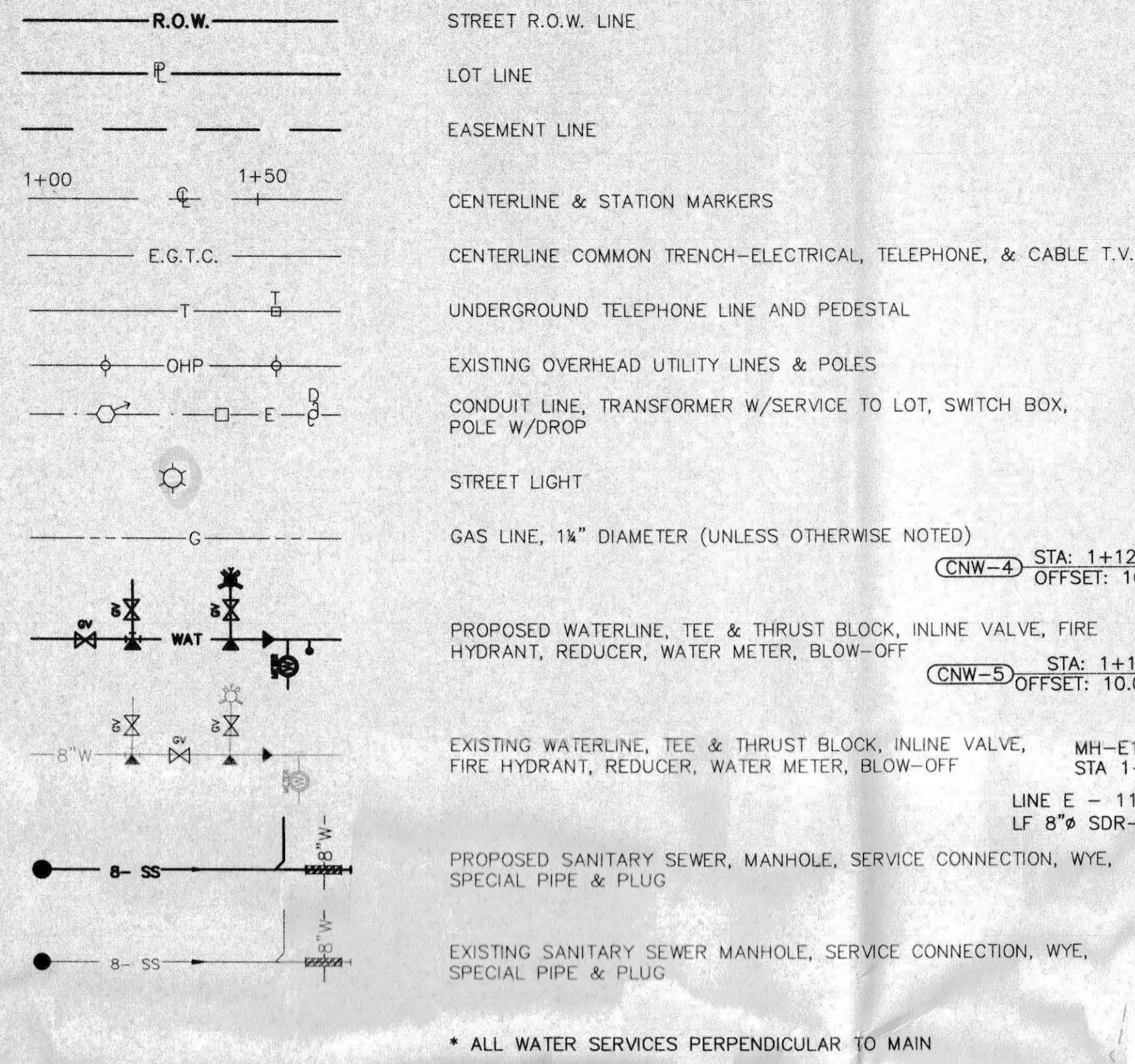
- All water line construction shall be in accordance with the Clifton Water Districts standards and specifications
- Contractor shall notify the Clifton Water District 48 hours prior to the beginning of construction.
- All trenches shall be compacted to 95% within 2% of optimum moisture content, as determined by AASHTO T-99. Contractor shall be required to perform all necessary compaction tests through a certified soils lab.
- Maximum cover required over top of new waterlines is 4'-6".
- All water mains, sizes 4" through 12", to be DR-18 PVC conforming to AWWA C-900
- All service connections to be 3/4" Type "K" copper.
- Cast iron fittings to conform to AWWA C-110.
- Fire Hydrants shall conform to AWWA C-502-85.
- All materials, labor and equipment required for testing and disinfection of waterlines shall be furnished by Contractor. Disinfection of waterlines shall conform to AWWA C-651-99 or latest revision thereof. No separate pay.
- All pipe bends/angle points, both horizontal and vertical, as called for on the plans are to be thrust blocked per Clifton Water District details and Technical Specifications.
- Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for waterline trench backfill unless otherwise approved by the Engineer.

| | |
|---|----------------|
| CHD | |
| BY | |
| REVISION | |
| DATE | |
| CITY OF GRAND JUNCTION | |
| G. B. WEST, LLC | |
| GENERAL LEGEND AND CONSTRUCTION NOTES | |
| THOMPSON-LANGFORD CORP. ENGINEERS AND LAND SURVEYORS 539 25 1/2 RD., SUITE B210 GRAND JUNCTION, COLORADO PH. (970) 243-6087 FAX (970) 241-2845 tlc@tlewest.com | |
| TLC | |
| DRAWN BY: | MH |
| CHECKED BY: | JWM |
| | |
| DATE: | April 23, 2003 |
| SCALE: | N.T.S. |
| Project No: | 0543-001 |
| SHEET NO.: | 2 OF 12 |

| | | |
|--|---|---|
| <p>ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. Acceptance of these plans does not relieve the developer, contractor, or the engineer from conformance with the City of Grand Junction Standard Specifications.</p> <p>City of Grand Junction Engineering Division Representative _____ Date _____</p> | <p>ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE CENTRAL GRAND VALLEY SANITATION DISTRICT</p> <p>_____ Date _____</p> | <p>APPROVED FOR CONSTRUCTION CLIFTON WATER DISTRICT</p> <p>_____ Date _____</p> |
| <p>ACCEPTED AS CONSTRUCTED</p> <p>City of Grand Junction Engineering Division Representative _____ Date _____</p> | <p>INITIAL ACCEPTANCE CENTRAL GRAND VALLEY SANITATION DISTRICT</p> <p>_____ Date _____</p> | <p>ACCEPTED AS CONSTRUCTED CLIFTON WATER DISTRICT</p> |

03-079

LEGEND

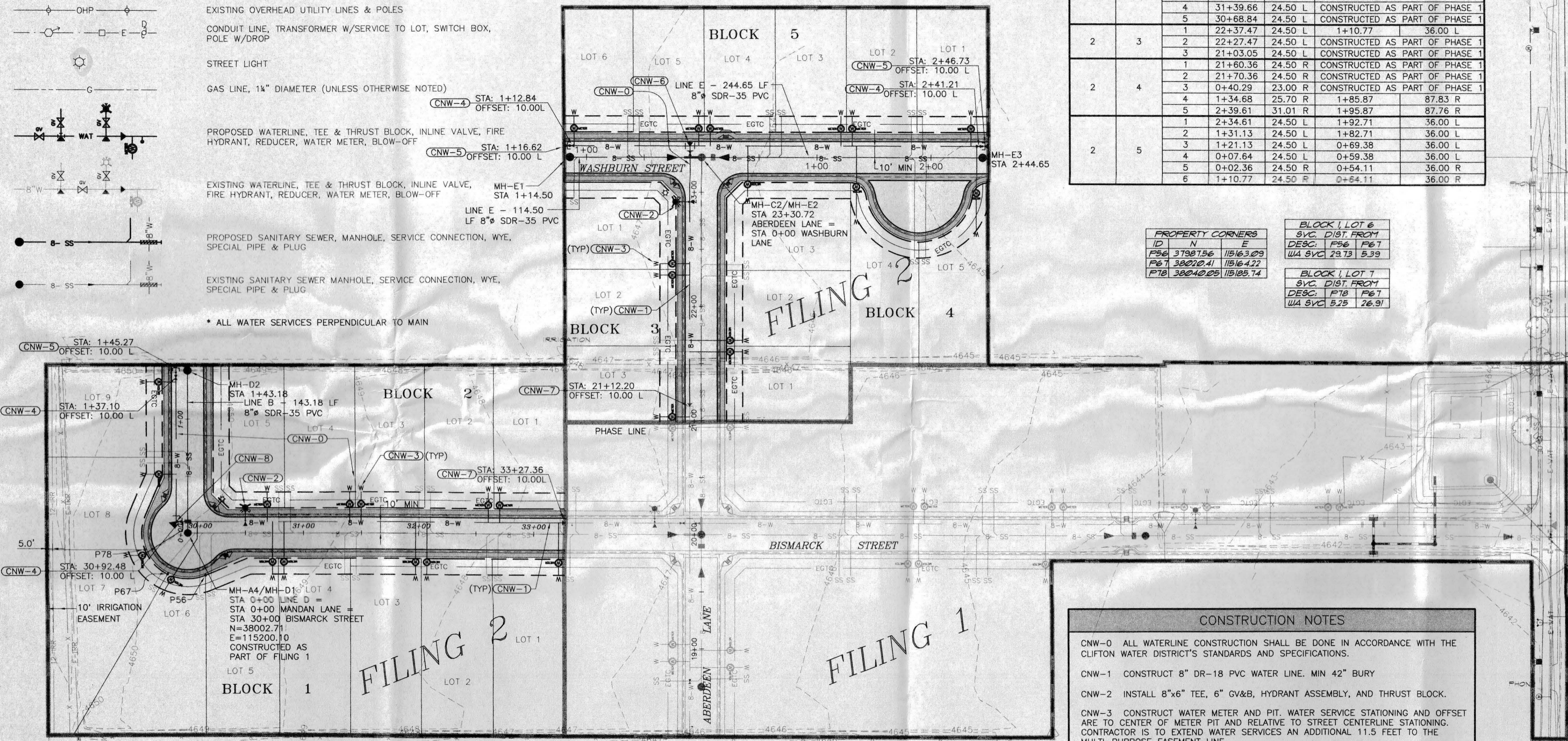


| COORDINATES | | | | | | | |
|-------------|-------|--------|--------------------|----------------|--------------------------------|---------|--|
| LOCATION ID | | WM PIT | | SEWER SERVICES | | | |
| PHASE | BLOCK | LOT # | ROADWAY STATIONING | ROADWAY OFFSET | STATIONING | OFFSET | |
| 2 | 1 | 1 | 33+21.37 | 24.50 R | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 2 | 32+07.25 | 24.50 R | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 3 | 31+97.37 | 24.50 R | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 4 | 30+83.25 | 24.50 R | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 5 | 30+73.37 | 24.50 R | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 6 | SEE BELOW | | 0+61.81 | 36.00 L | |
| | | 7 | SEE BELOW | | 0+71.81 | 36.00 L | |
| | | 8 | 0+51.82 | 24.50 L | | | |
| | | 9 | 1+33.15 | 24.50 L | | | |
| 2 | 2 | 1 | 32+70.79 | 24.50 L | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 2 | 32+60.79 | 24.50 L | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 3 | 31+49.66 | 24.50 L | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 4 | 31+39.66 | 24.50 L | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 5 | 30+68.84 | 24.50 L | CONSTRUCTED AS PART OF PHASE 1 | | |
| 2 | 3 | 1 | 22+37.47 | 24.50 L | 1+10.77 | 36.00 L | |
| | | 2 | 22+27.47 | 24.50 L | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 3 | 21+03.05 | 24.50 L | CONSTRUCTED AS PART OF PHASE 1 | | |
| 2 | 4 | 1 | 21+60.36 | 24.50 R | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 2 | 21+70.36 | 24.50 R | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 3 | 0+40.29 | 23.00 R | CONSTRUCTED AS PART OF PHASE 1 | | |
| | | 4 | 1+34.68 | 25.70 R | 1+85.87 | 87.83 R | |
| | | 5 | 2+39.61 | 31.01 R | 1+95.87 | 87.76 R | |
| | | 6 | 2+34.61 | 24.50 L | 1+92.71 | 36.00 L | |
| 2 | 5 | 1 | 1+31.13 | 24.50 L | 1+82.71 | 36.00 L | |
| | | 3 | 1+21.13 | 24.50 L | 0+69.38 | 36.00 L | |
| | | 4 | 0+07.64 | 24.50 L | 0+59.38 | 36.00 L | |
| | | 5 | 0+02.36 | 24.50 R | 0+54.11 | 36.00 R | |
| | | 6 | 1+10.77 | 24.50 R | 0+64.11 | 36.00 R | |

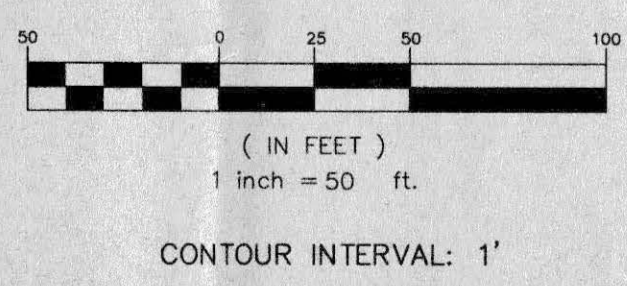
| PROPERTY CORNERS | | |
|------------------|---------|-----------|
| ID | N | E |
| P56 | 3798756 | 115163.09 |
| P67 | 3802041 | 115164.22 |
| F18 | 3804028 | 115185.14 |

| BLOCK 1, LOT 6 | | |
|-----------------|-------|------|
| SVC. DIST. FROM | P56 | P67 |
| WA SVC | 29.73 | 5.39 |

| BLOCK 1, LOT 7 | | |
|-----------------|------|-------|
| SVC. DIST. FROM | P56 | P67 |
| WA SVC | 5.29 | 26.91 |



PROJECT BENCHMARK:
 INTERSECTION OF D 1/2 AND 31 ROADS
 MESA CITY BRASS CAP NE CORNER OF
 NE 1/4, SE 1/4, SEC 16
 N: 36806.17
 E: 115844.96
 ELEV. 4643.73



CALL UTILITY NOTIFICATION
 CENTER OF COLORADO
1-800-922-1987
 CALL 2 BUSINESS DAYS IN ADVANCE
 BEFORE YOU DIG, GRADE, OR EXCAVATE
 FOR THE MARKING OF UNDERGROUND
 MEMBER UTILITIES.

CONSTRUCTION NOTES

CNW-0 ALL WATERLINE CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CLIFTON WATER DISTRICT'S STANDARDS AND SPECIFICATIONS.

CNW-1 CONSTRUCT 8" DR-18 PVC WATER LINE. MIN 42" BURY

CNW-2 INSTALL 8"x6" TEE, 6" GV&B, HYDRANT ASSEMBLY, AND THRUST BLOCK.

CNW-3 CONSTRUCT WATER METER AND PIT. WATER SERVICE STATIONING AND OFFSET ARE TO CENTER OF METER PIT AND RELATIVE TO STREET CENTERLINE STATIONING. CONTRACTOR IS TO EXTEND WATER SERVICES AN ADDITIONAL 11.5 FEET TO THE MULTI-PURPOSE EASEMENT LINE.

CNW-4 INSTALL 8" GV&B.

CNW-5 INSTALL BLOWOFF PLUG & THRUSTBLOCK

CNW-6 INSTALL 8"x8" TEE, (1)-8" GV&B & THRUST BLOCK.

CNW-7 REMOVE PLUG & BLOWOFF AND CONNECT TO EXISTING WATER LINE.

CNW-8 INSTALL 90° BEND AND THRUST BLOCK.

UTILITIES WILL BE PROVIDED TO THE SITE BY THE FOLLOWING VENDORS

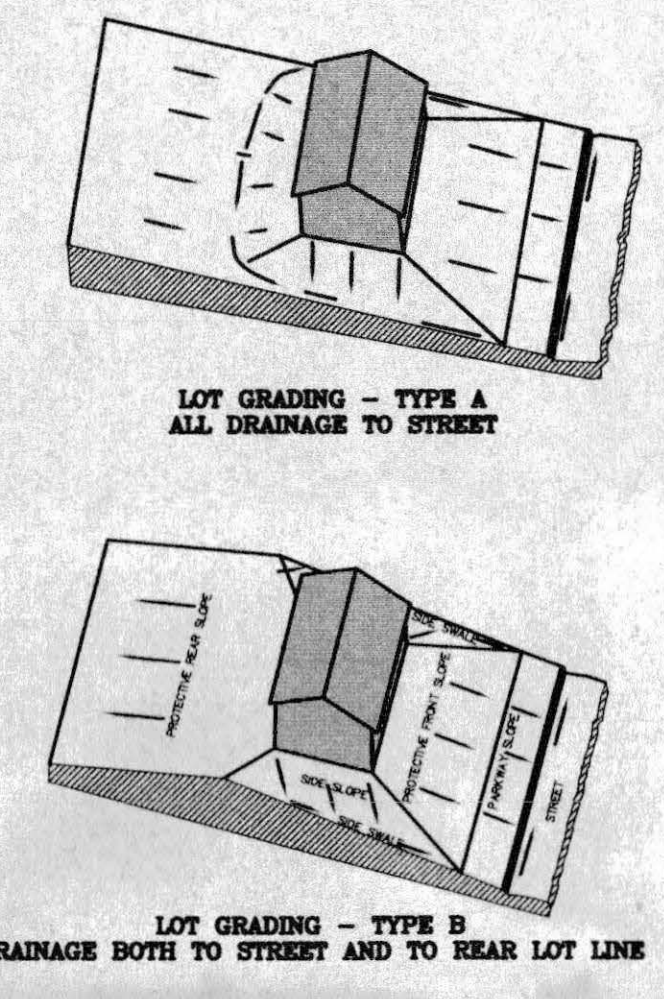
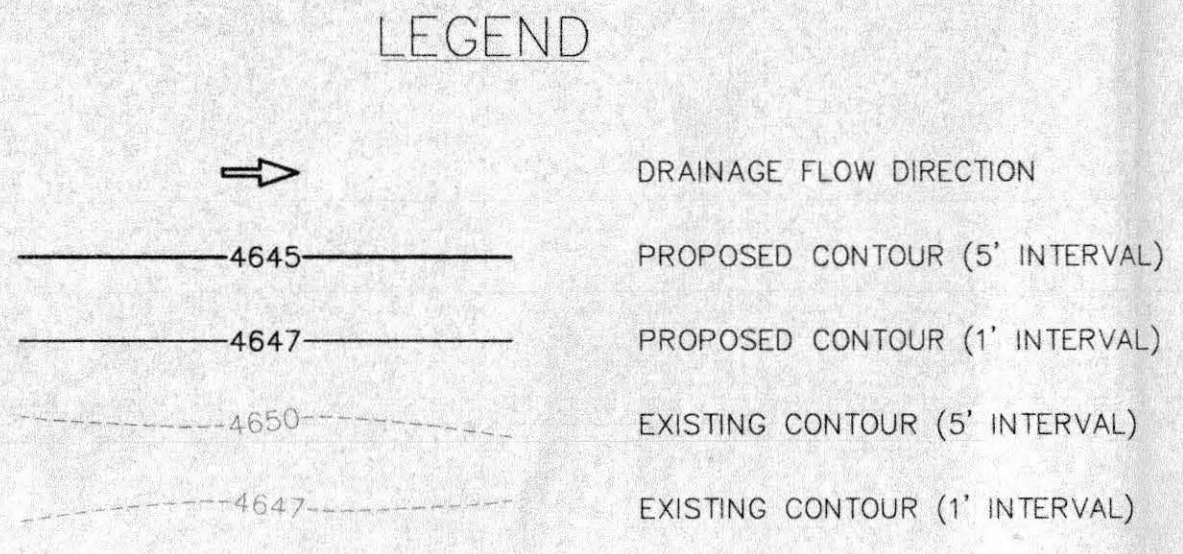
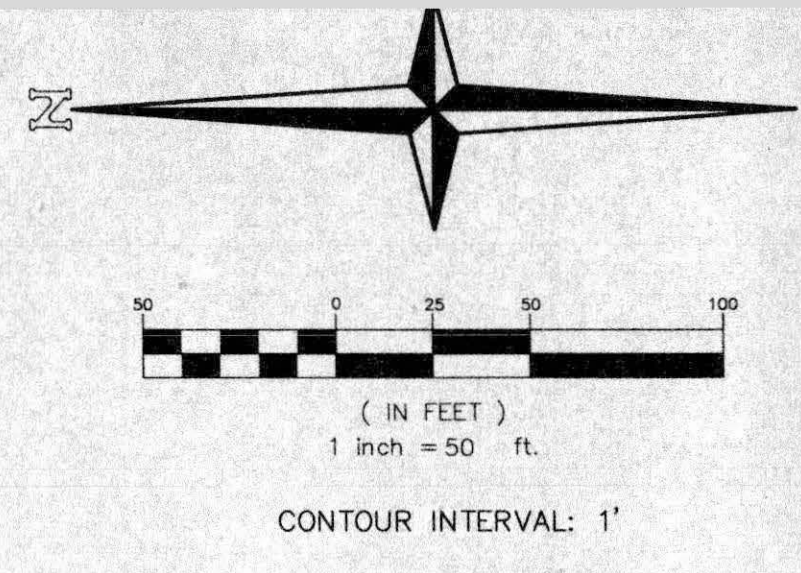
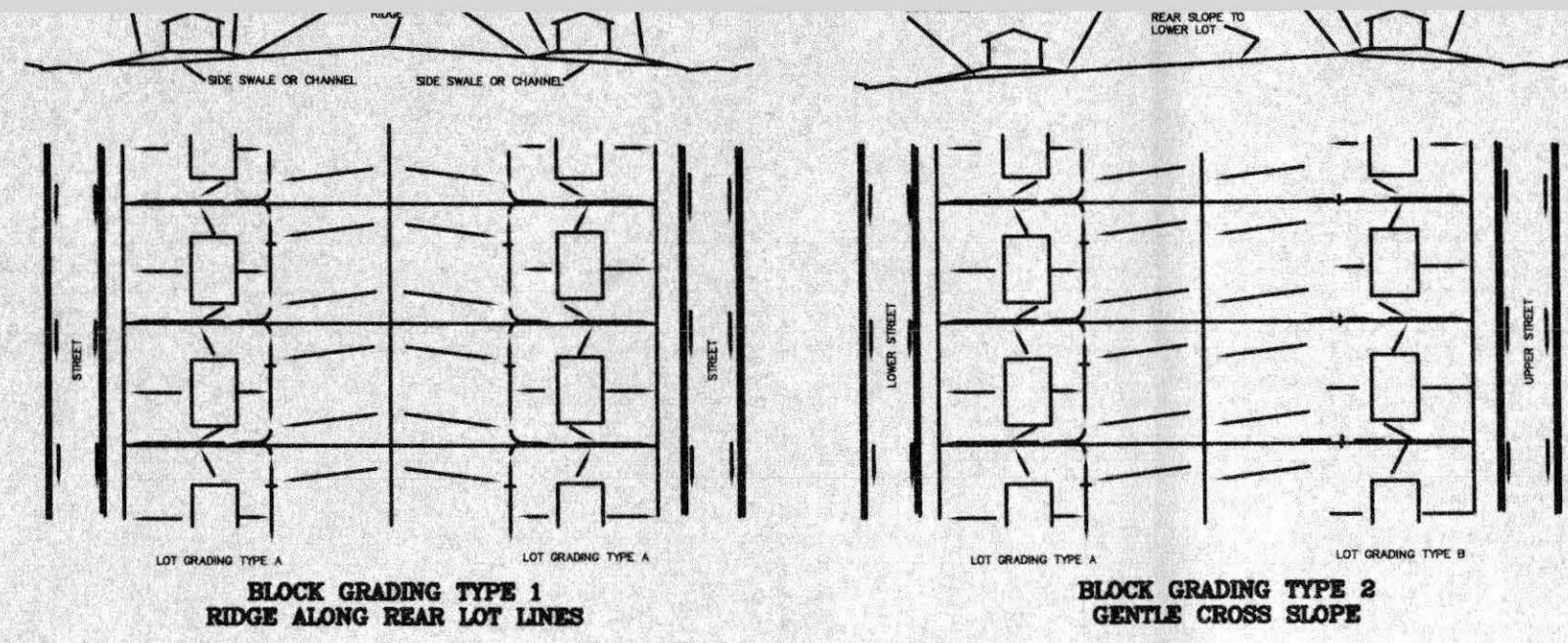
| | |
|-------------------|--|
| GAS AND ELECTRIC: | XCEL ENERGY |
| WATER: | CLIFTON WATER DISTRICT |
| CABLE TELEVISION: | AT&T |
| SANITARY SEWER: | CENTRAL GRAND VALLEY SANITATION DISTRICT |
| TELEPHONE: | QWEST |
| IRRIGATION | GRAND VALLEY IRRIGATION DISTRICT |
| DRAINAGE | GRAND JUNCTION DRAINAGE DISTRICT |

| | | |
|---|---|---|
| ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE CENTRAL GRAND VALLEY SANITATION DISTRICT | ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. Acceptance of these plans does not relieve the developer, contractor, or the engineer from conformance with the City of Grand Junction Standard Specifications. | APPROVED FOR CONSTRUCTION CLIFTON WATER DISTRICT |
| INITIAL ACCEPTANCE CENTRAL GRAND VALLEY SANITATION DISTRICT | ACCEPTED AS CONSTRUCTED City of Grand Junction Engineering Division Representative | ACCEPTED AS CONSTRUCTED CLIFTON WATER DISTRICT |

| | |
|-------------|-----------------|
| DATE: | April 23, 2003 |
| SCALE: | Horiz: 1" = 50' |
| Project No: | 0543-001 |
| SHEET No: | 3 OF 12 |

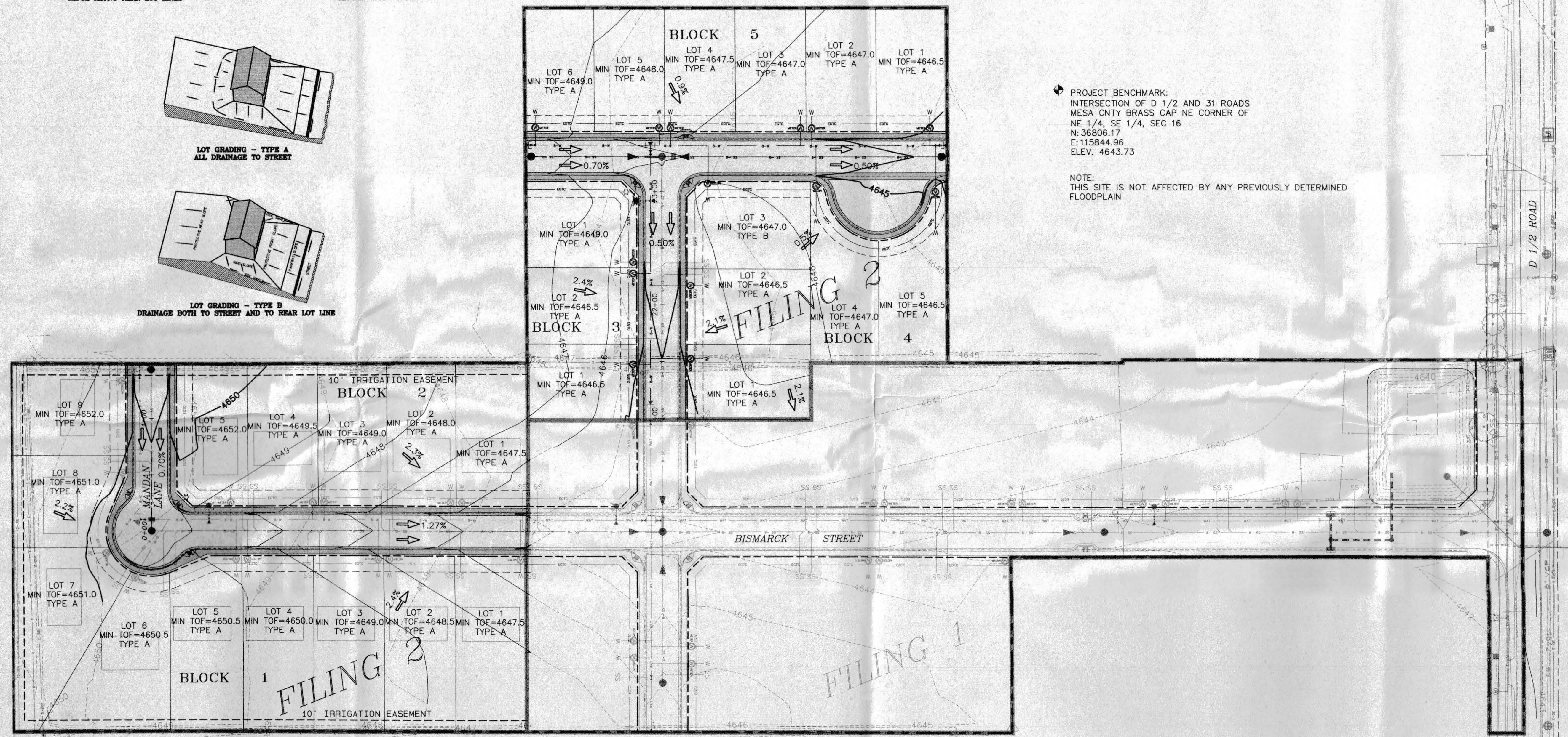
THOMPSON-LANGFORD CORP.
 ENGINEERS AND LAND SURVEYORS
 529 25 1/2 RD., SUITE B210
 GRAND JUNCTION, COLORADO
 PH: (970) 243-6067
 FAX: (970) 241-2845
 tlc@tlwest.com

CITY OF GRAND JUNCTION
 G B R WEST, LLC
 UTILITY/COMPOSITE PLAN FOR
 DAKOTA WEST SUBDIVISION



PROJECT BENCHMARK:
INTERSECTION OF D 1/2 AND 31 ROADS
MESA CNTY BRASS CAP NE CORNER OF
NE 1/4, SE 1/4, SEC 16
N: 36806.17
E: 115844.96
ELEV. 4643.73

NOTE:
THIS SITE IS NOT AFFECTED BY ANY PREVIOUSLY DETERMINED
FLOODPLAIN



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2 BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
Acceptance of these plans does not relieve the developer, contractor, or the engineer from conformance
with the City of Grand Junction Standards Specifications.

DATE: April 23, 2003
SCALE: 1" = 50'
Project No: 0543-001
SHEET NO: 4 OF 12

City of Grand Junction Engineering Division Representative _____ Date _____

ACCEPTED AS CONSTRUCTED

City of Grand Junction Engineering Division Representative _____ Date _____

| | |
|--|-----|
| BY | |
| REVISION | |
| DATE | |
| CITY OF GRAND JUNCTION | |
| GRADING & DRAINAGE PLAN FOR | |
| DAKOTA WEST SUBDIVISION | |
| C & R WEST, LLC | |
| THOMPSON-LANGFORD CORP. | |
| ENGINEERS AND LAND SURVEYORS | |
| 529 25 1/2 RD., SUITE B210 | |
| GRAND JUNCTION, COLORADO | |
| PH. (970) 243-6067 | |
| FAX (970) 241-2845 | |
| tlc@tlcwest.com | |
| DRAWN BY: | MH |
| CHECKED BY: | JWM |
| | |

05-071

STORMWATER MANAGEMENT PLAN

DAKOTA WEST SUBDIVISION - FILING 3

GRAND JUNCTION, COLORADO

EROSION CONTROL MEASURES Performance Standards

- The general requirements for erosion control work shall be as follows:
- Any grading shall be conducted in such a manner so as to effectively reduce accelerated soil erosion and resulting sedimentation.
 - All grading shall be designed, constructed and completed in such a manner so that exposed area of any disturbed land shall be limited to the shortest time period.
 - Sediment caused by accelerated soil erosion shall be removed from runoff water before leaving the site.
 - Any temporary or permanent facility designed and constructed for the conveyance of water around, through, or from the graded area shall be designed to limit the water flow to a non-erosive velocity.
 - Temporary soil erosion control facilities shall be removed and areas graded and stabilized with permanent soil erosion control measures pursuant to approved plans and specifications.

General Notes

- At all times during construction, erosion and sediment control shall be maintained by the contractor.
- Erosion control system shall be installed as grading progresses.
- Details shown are schematic only. Adjust as necessary to fit field conditions.
- Negative impacts to downstream areas (or receiving waters) caused by the overlot grading and/or construction to be monitored and corrected by the contractor.

Maintenance

- The developer or his designated representative shall make routine checks on all erosion control measures to determine if repairs or sediment removal is necessary.
- After each rainfall or moderate snow melt, erosion control measures are to be checked. If repairs are needed, they shall be completed immediately.
- Silt and sediment shall be removed after each substantial rainfall. Deposits must be removed when they reach a height of one-half of the barrier (silt fence).
- When temporary measures are to be removed, any silt and sediment deposits shall be removed and spread evenly in open areas and seeded as necessary.

During Construction (Temporary Measures)

- Silt Fence:** Silt fence shall be at storm sewer outlets into channels and at all inlet locations. Installation shall be in accordance with Detail B as shown on this sheet.
- Place silt fence (SF) at the tops and toes of slopes and behind the curb and gutter where called for on this plan as soon as the backing for the curb and gutter is in place and the overlot grading is complete.**
- Compact topsoil 80-85% standard density and finish grade to elevations shown on the grading plan. Eliminate low spots and round out abrupt changes in slope.**
- Contractor shall have a water truck made available to assist in controlling dust and wind erosion.**
- Construction traffic entrances (mud traps) shall be installed prior to commencement of construction activities and shall be cleaned on a continual basis during construction.**

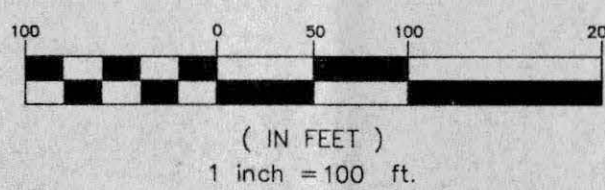
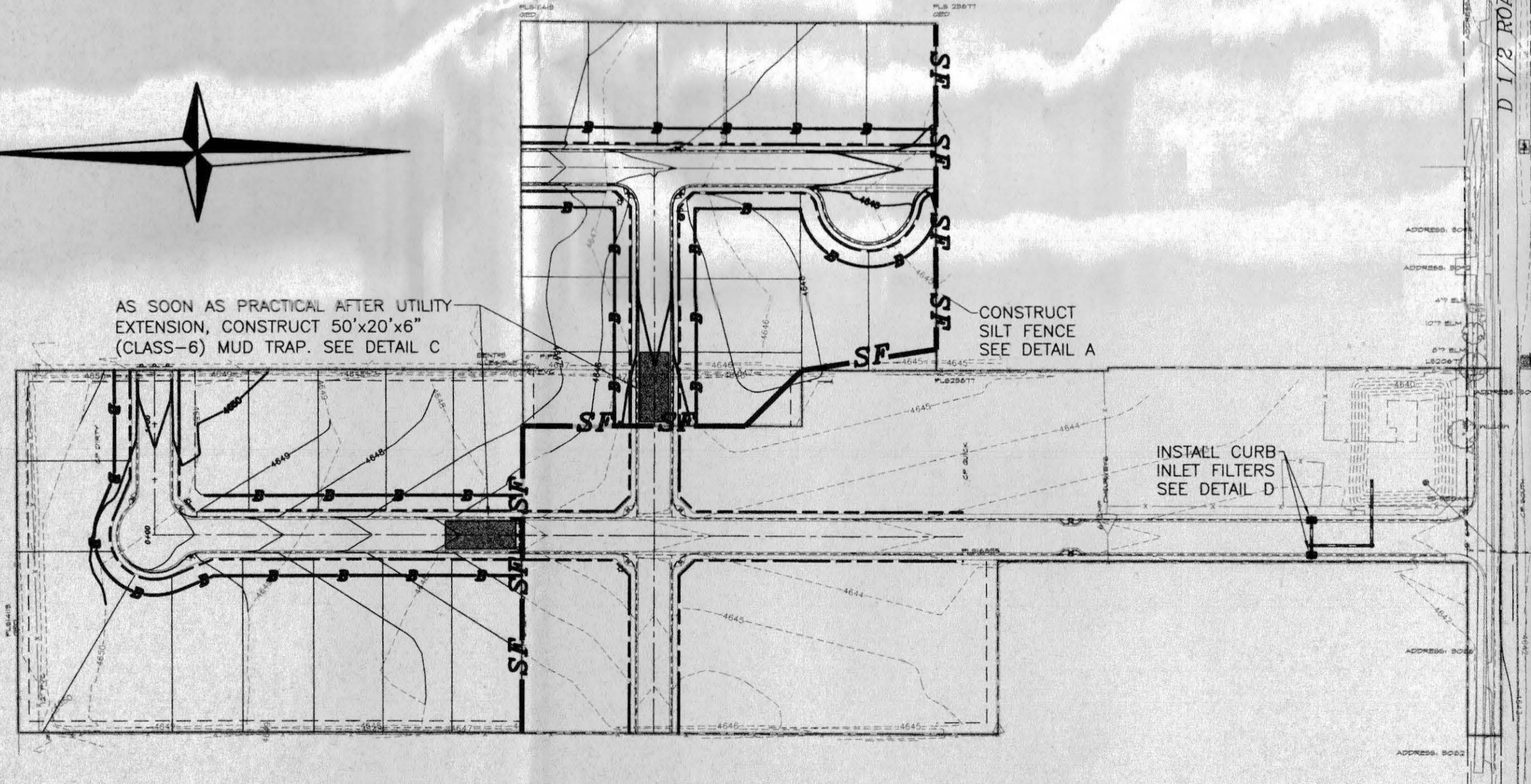
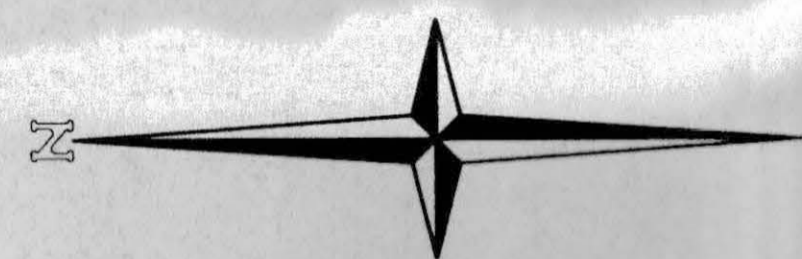
After Construction (Permanent Measures)

- Rip-Rap:** The use of rip-rap is proposed for all storm sewer outlets. The rip-rap shall function to take the impact of the release water, thereby reducing velocities to a non-erosive rate (see grading & drainage plan).
- Gravel filters @ inlets:** Following paving, gravel filters in accordance with Detail D, shall be constructed and maintained by the contractor until his contract is complete. At that time, responsibility for maintenance shall be transferred to the owner.
- Landscape Areas:** In improved open spaces, grass and trees with an irrigation system will be required for controlling erosion after land development & home construction are complete.
- Native Grass Areas:** After completion of grading activities, broadcast seed with special seed mix listed below and hydromulch with an organic mulch. In areas which have a slope at or exceeding 3:1, add an approved tackifier to hydromulch.

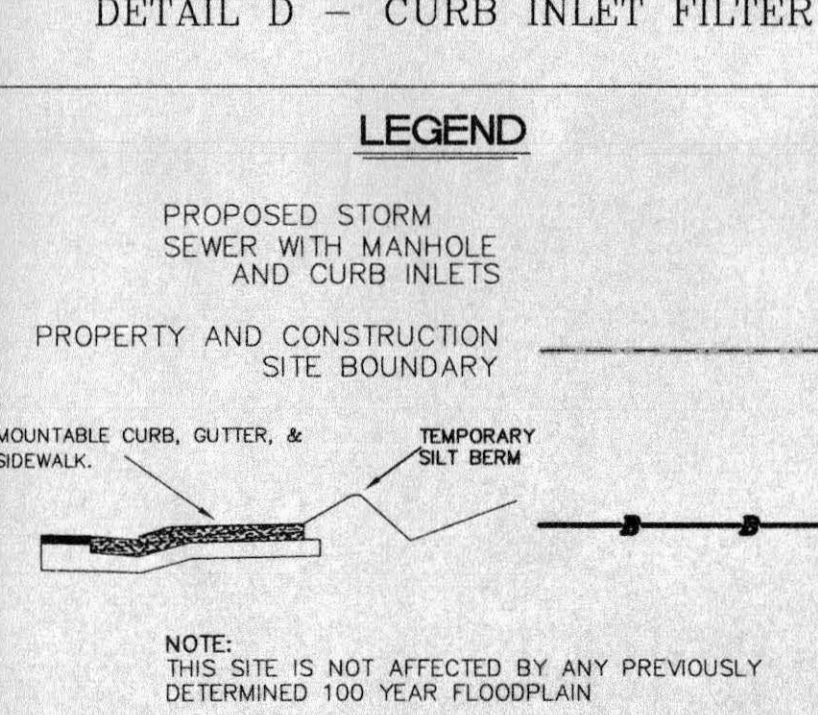
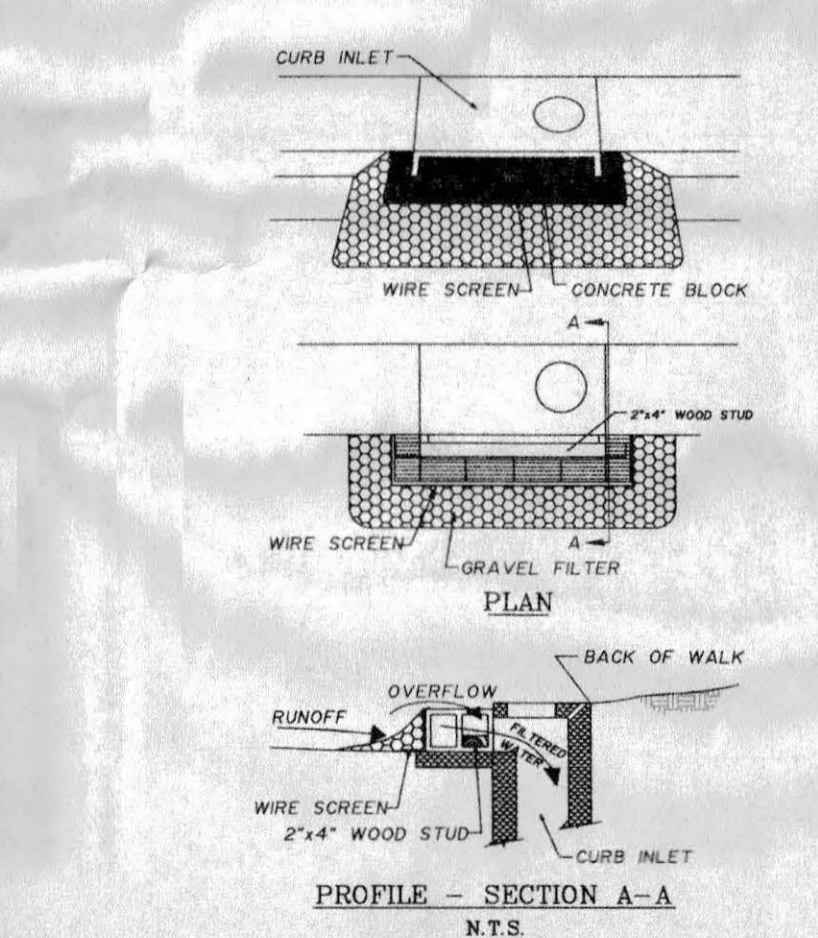
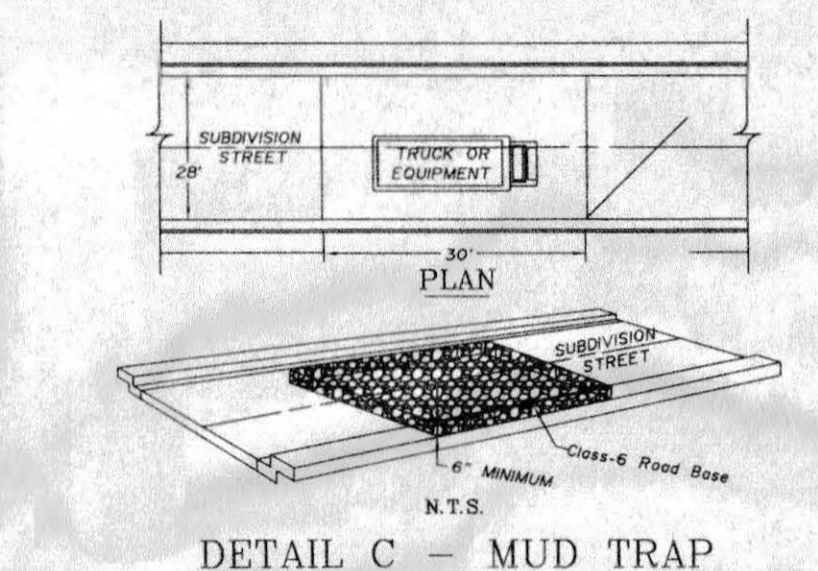
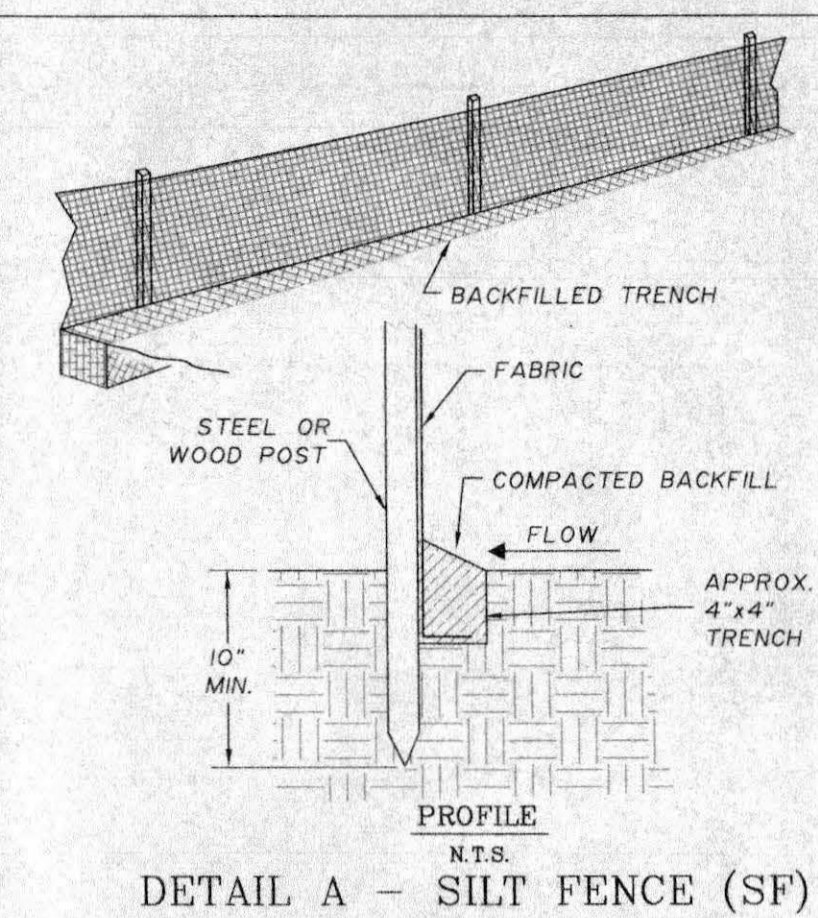
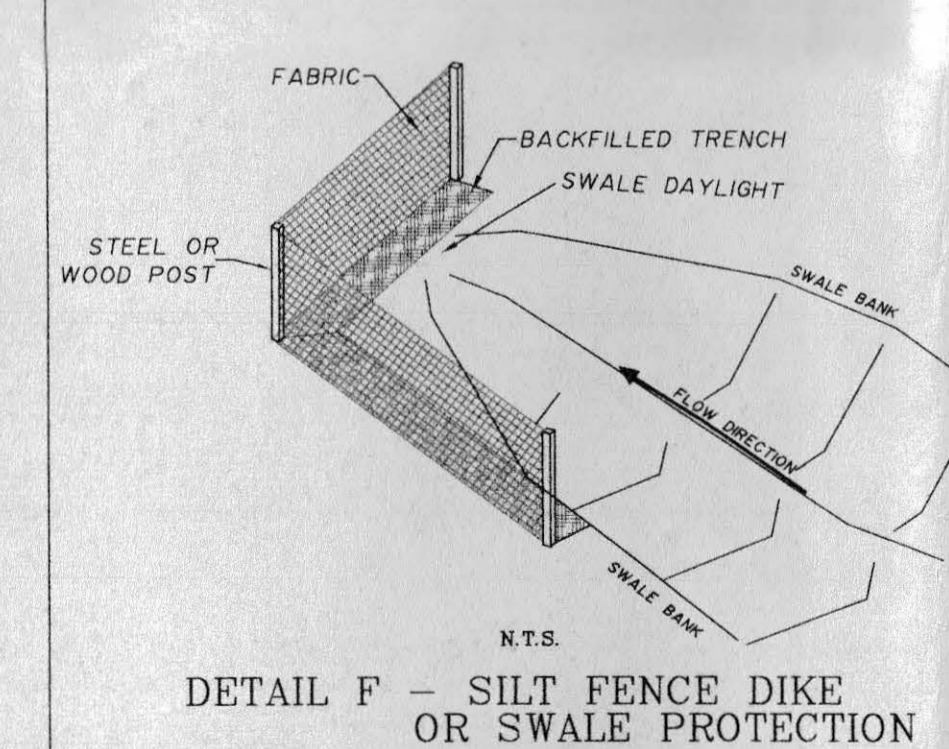
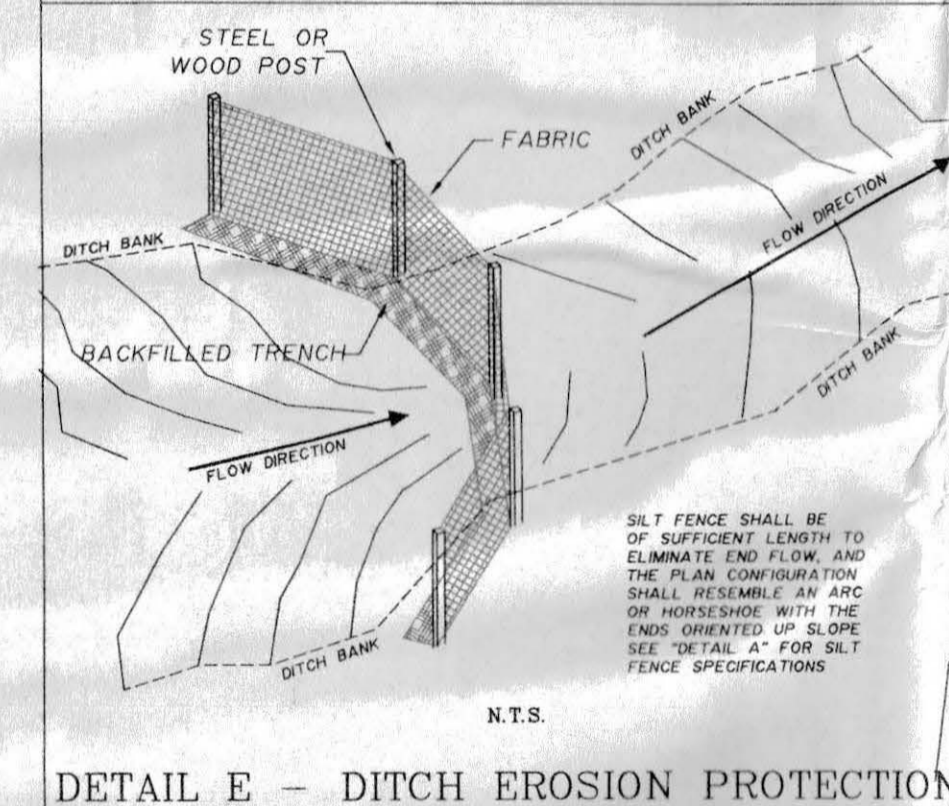
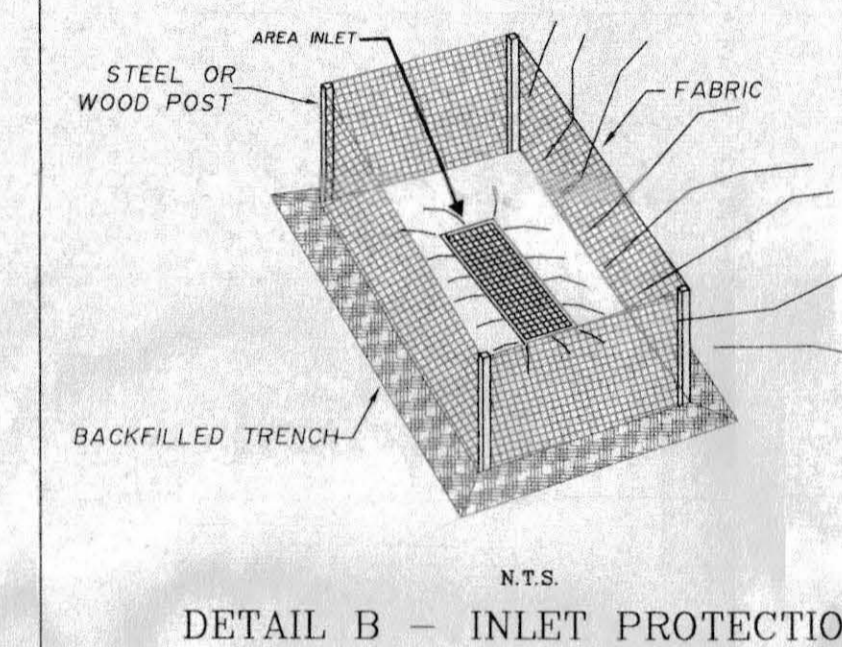
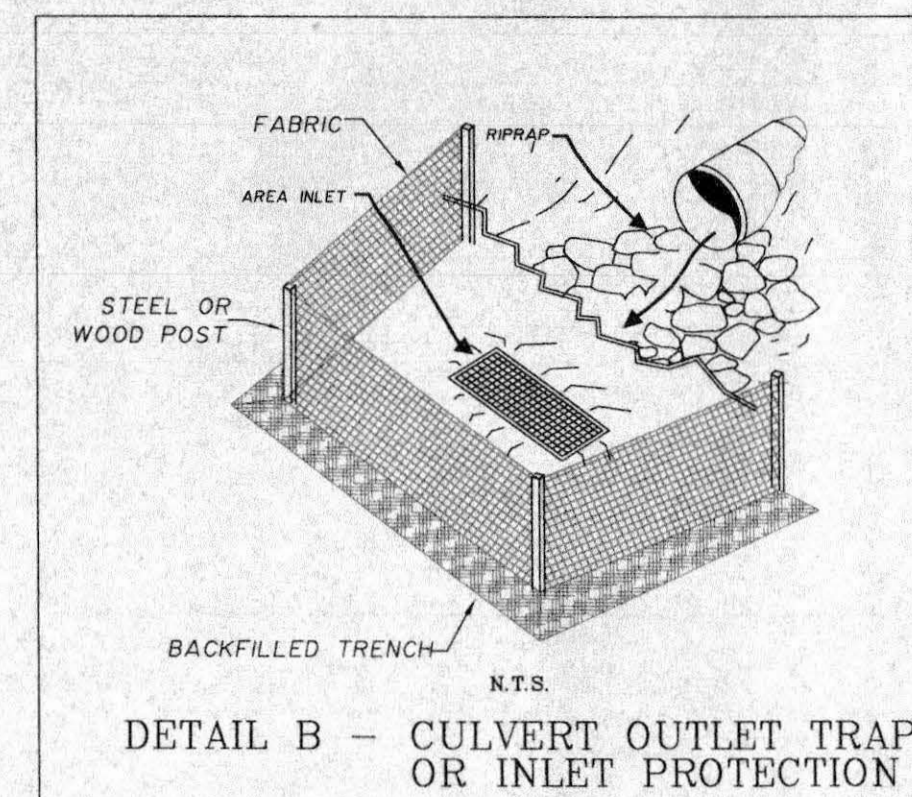
Seeding shall be done with a brilliant drill into a slightly moist seedbed. The seeding shall be done in two separate applications crossing the area at right angles (if possible) to one another to guarantee proper coverage. Each application shall be at 1/2 the total rate noted in the table below.

NONIRRIGATED REVEGETATIVE SEED MIX:

| COMMON NAME | SCIENTIFIC NAME | Lbs/Acre | PLS |
|-------------------------|---------------------------------|-----------|-------|
| Blue Fescue | Linum perenne "Lewisii" | 14 oz. | 10.0% |
| Hard Fescue | Festuca ovina Spartan | 3.50 lbs. | 15.0% |
| Alkali Sacaton | Sporobolus airoides | 2.33 lbs. | 10.0% |
| Intermediate Wheatgrass | Agropyron intermedium "Oahu" | 1.19 lbs. | 10.0% |
| Galleta | Hilaria jamesii | 11.20 oz. | 5.0% |
| Crested Wheatgrass | Agropyron cristatum "Highcrest" | 1.13 lbs. | 10.0% |
| Western Wheatgrass | Agropyron smithii "Fairfax" | 2.26 lbs. | 20.0% |
| Full's Alkali Grass | Puccinellia distans "Falls" | 7.96 lbs. | 20.0% |



CONTOUR INTERVAL: 1'



ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
Acceptance of these plans does not relieve the developer, contractor, or the engineer from conformance with the City of Grand Junction Standard Specifications.

City of Grand Junction Engineering Division Representative _____ Date _____
ACCEPTED AS CONSTRUCTED
 City of Grand Junction Engineering Division Representative _____ Date _____

| | | | | | | | |
|--------------|-----------------|----------------------|-------------|------------------------------------|-----------------|--|------------------------------------|
| BY: _____ | DATE: _____ | REVISION: _____ | DATE: _____ | CITY OF GRAND JUNCTION | G & B WEST, LLC | THOMPSON-LANGFORD CORP. ENGINEERS AND LAND SURVEYORS 529 25 1/2 RD, SUITE R210 GRAND JUNCTION, COLORADO PH. (970) 243-6067 FAX (970) 241-2845 tlc@tlwest.com | STORM WATER MANAGEMENT PLAN |
| | | | | | | | |
| DRAWN BY: MH | CHECKED BY: JWM | DATE: April 23, 2003 | | SCALE: Horiz: 1" = 50' Ver: N/A | | PROJECT NO: 0543-001 SHEET NO: 5 OF 12 | |